MUSCLE SHOALS COUNCIL OF LOCAL GOVERNMENTS

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POPULATION AND ECONOMY

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ABSTRACT

Title: *Population and Economy Study for the Muscle Shoals Alabama Region—Volume I*

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Abstract:

Volume I of the Population and Economy Study is a qualitative analysis of factors which both affect and influence the Muscle Shoals Planning Area (Colbert and Lauderdale Counties). An examination of changing population characteristics shows that while overall population growth rates for both counties exceed the State rate of growth, a serious problem exists in the loss, through out-migration, of young productive workers in the age group 20-34. The Region has experienced significant growth in family income, and median family income in both counties exceeds the State average, however, the region is still nearly $300 below the National median.

The economy upon which the Muscle Shoals Area is dependent has improved significantly during the past several years. Total wage and salary employment in the area increased by 24.6 percent during the past 10 years, however, employment declines occurred in the agricultural, self-employed, and domestic service groups. It is evident that jobs need to be created at a faster rate to keep the highly educated, but also highly mobile, young productive group of workers from out-migrating for better economic opportunity.

Sizable growth in the economy, and the population served by the economy, is expected during the planning period. Provided that methodical industrial development efforts can create the needed jobs and improve the degree of diversification of the industrial base, the Muscle Shoals Area should produce population growth of more than 34 percent by 1980.

VOLUME I

POPULATION AND ECONOMY STUDY
FOR
THE MUSCLE SHOALS
COUNCIL OF LOCAL GOVERNMENTS

Rust Contract No. BE-0159B

THE RUST ENGINEERING COMPANY
BIRMINGHAM, ALABAMA

A DIVISION OF LITTON INDUSTRIES
BEVERLY HILLS, CALIFORNIA

April, 1969

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INTRODUCTION

This Economic Base and Population Study was prepared as part of a Comprehensive Planning Program for the Muscle Shoals Council of Local Governments.

The purpose of the Economic Base Study is to analyze the existing and potential structure of the economic base of Colbert and Lauderdale Counties which includes the cities of Florence, Sheffield, Tuscumbia, Muscle Shoals, Leighton, Cherokee, Littleville, Waterloo, Lexington, Rogersville, Killen, and Anderson. The purpose of the Population Study is to provide a means of expressing the economic growth potential in terms of the population it is expected to serve.

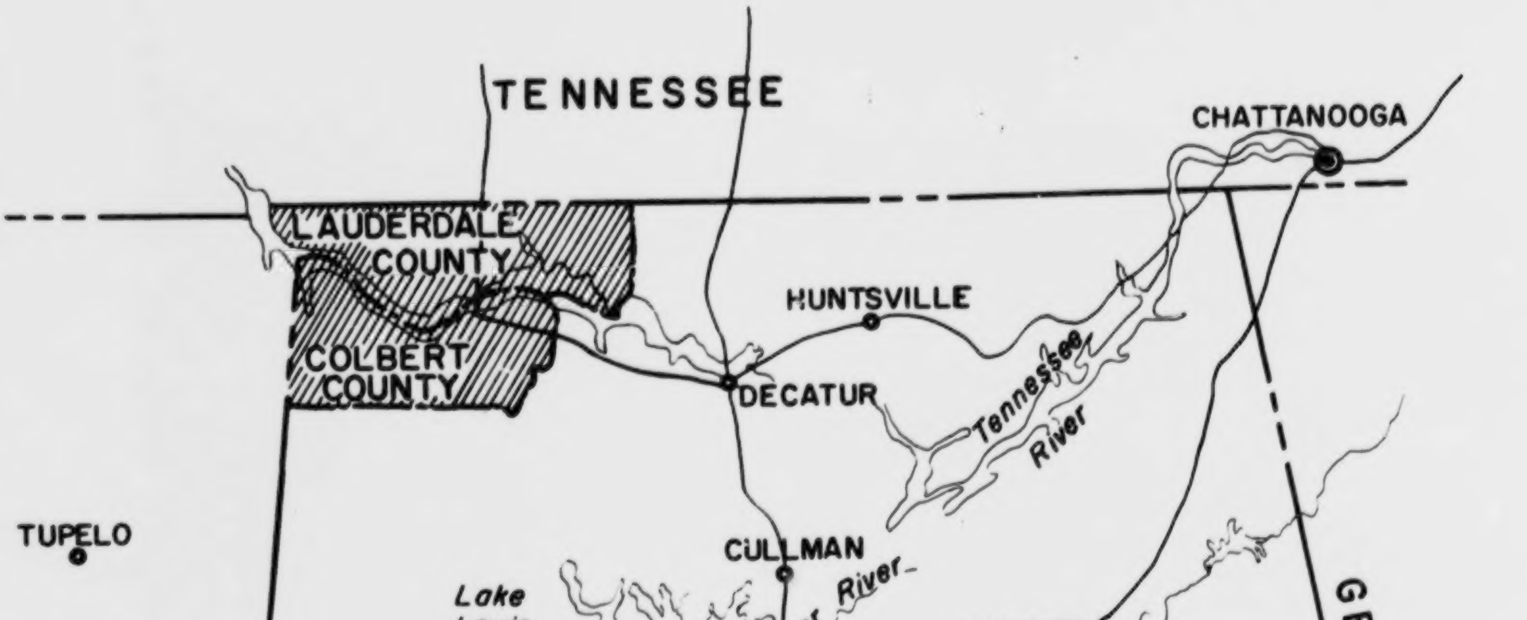
A very thorough study entitled The Economy of Florence and the Muscle Shoals Region was prepared as part of the Comprehensive Planning Program of the Florence Planning Commission in November 1966 by Hammer, Greene, Siler Associates, Economic Consultants of Washington, D.C. To avoid duplication of research, much of the overall basic information on the historical development of the Muscle Shoals area and some statistical data reflecting economic indicators and population relationships in Colbert and Lauderdale Counties were taken directly from this excellent study.

While the end products of those engaged in community planning are generally expressed in the form of physical documents—maps, reports and the like—the object is to produce meaningful plans for the people involved. The plans, therefore, must be based on a knowledge of the wants and capabilities of the population served—the number, age groups and characteristics of the present and future inhabitants of the planning area.

Due to the many significant interrelationships between Colbert and Lauderdale Counties and the availability of statistical data reflecting these relationships, it was considered most meaningful to evaluate the two counties as one economic unit in Volume 1 of this study. (Volume 1 was financed in part by a grant from the U.S. Department of Housing and Urban Development.) In Volume 2 all incorporated areas in Colbert and Lauderdale Counties are evaluated separately except for the City of Florence, which was evaluated economically and demographically as part of comprehensive planning for that City in November, 1966.

This report attempts to provide a framework to assist in developing the Comprehensive Plan for the future development of the Muscle Shoals Area. The report necessarily includes information on the various towns, the counties, the State and the Nation since the course of development of the local area is affected by developments in the larger regions of which it is a part. With an understanding of the changing economy in the other areas and its effect on local patterns of development, realistic guidelines for the future of the Muscle Shoals area can be developed. Sound planning, conducted by local dedicated leaders, can go far toward influencing favorable development.

REGIONAL SETTING
MUSCLE SCHOALS, ALABAMA


TENNESSEE
CHATTANOOGA
LAUDERDALE COUNTY
COLBERT COUNTY
HUNTSVILLE
DECATUR
Tennessee River
TUPELO
CULLMAN
Lake Lewis Smith
Warrior River
GADSDEN
GEORGIA
ALABAMA
River
BIRMINGHAM
Black
MISSISSIPPI
TUSCALOOSA
Coosa
River
Lake Martin
Tallapoosa
SELMA
MONTGOMERY
MERIDIAN

DEMOGRAPHIC ANALYSIS OF THE MUSCLE SHOALS AREA

GENERAL GROWTH

The total population of the Muscle Shoals area has increased steadily over the past 60 years with sizable gains in each decade with one exception. The decade of the twenties produced a slight decline of 0.8 percent for the area which was mainly the result of outmigration of population from Colbert County. Table 1 and Chart 1 illustrate these total population relationships in the Muscle Shoals area for Colbert and Lauderdale Counties and compare the trends with that of Alabama.

From 1900 to 1920 the population growth rate more than doubled in the two-county area as new residents left their farms and steadily flowed in with plans to secure construction and factory jobs in what promised to be a booming industrial complex on the banks of the beautiful Tennessee River. The Federal Government selected Muscle Shoals in 1916 as the site for construction of two nitrate plants and a steam-electric generating station. The nitrate plants were to be used to produce munitions ingredients in wartime and agricultural chemicals or fertilizers in peacetime. Construction and operation, including building the necessary power generating facilities, was initiated in 1916. Construction of a dam at the Shoals was authorized in 1918 as part of a navigation, flood control and power development plan for the area.

With the armistice ending World War I, construction was halted on all Government projects at Muscle Shoals. Neither of the nitrate plants had been completed in time to produce nitrate for munitions in the war effort, and while $17 million had been invested on the dam, there was much yet to be done. Many offers at low rates were made by power companies, chemical companies and other enterprises to take over the dam and munitions plants, but all offers were rejected by the Federal Government. At that time the entire Muscle Shoals project appeared to be a misallocation of over $125 million in public funds.

For more than a decade the nitrate plant facilities lay idle. Many of the new families which had moved into the Muscle Shoals region for construction work were forced to leave the area to seek employment elsewhere. This out-migration from the area was very obvious during the period 1920 to 1930 as the growth trend reversed in the region and an overall decline of 0.8 percent resulted. Lauderdale County's population growth rate reduced to only 4.0 percent, as compared to a rate of 27.9 percent during the previous decade. Colbert County experienced a net loss of more than 2,000 residents for a decline of 6.7 percent, as compared to an increase of 29 percent during the previous decade. During this period of population decline in the Muscle Shoals region, the State of Alabama was rapidly growing with a gain of 12.7 percent between 1920 and 1930.

TABLE 1

POPULATION TRENDS FOR COLBERT AND LAUDERDALE COUNTIES AND ALABAMA

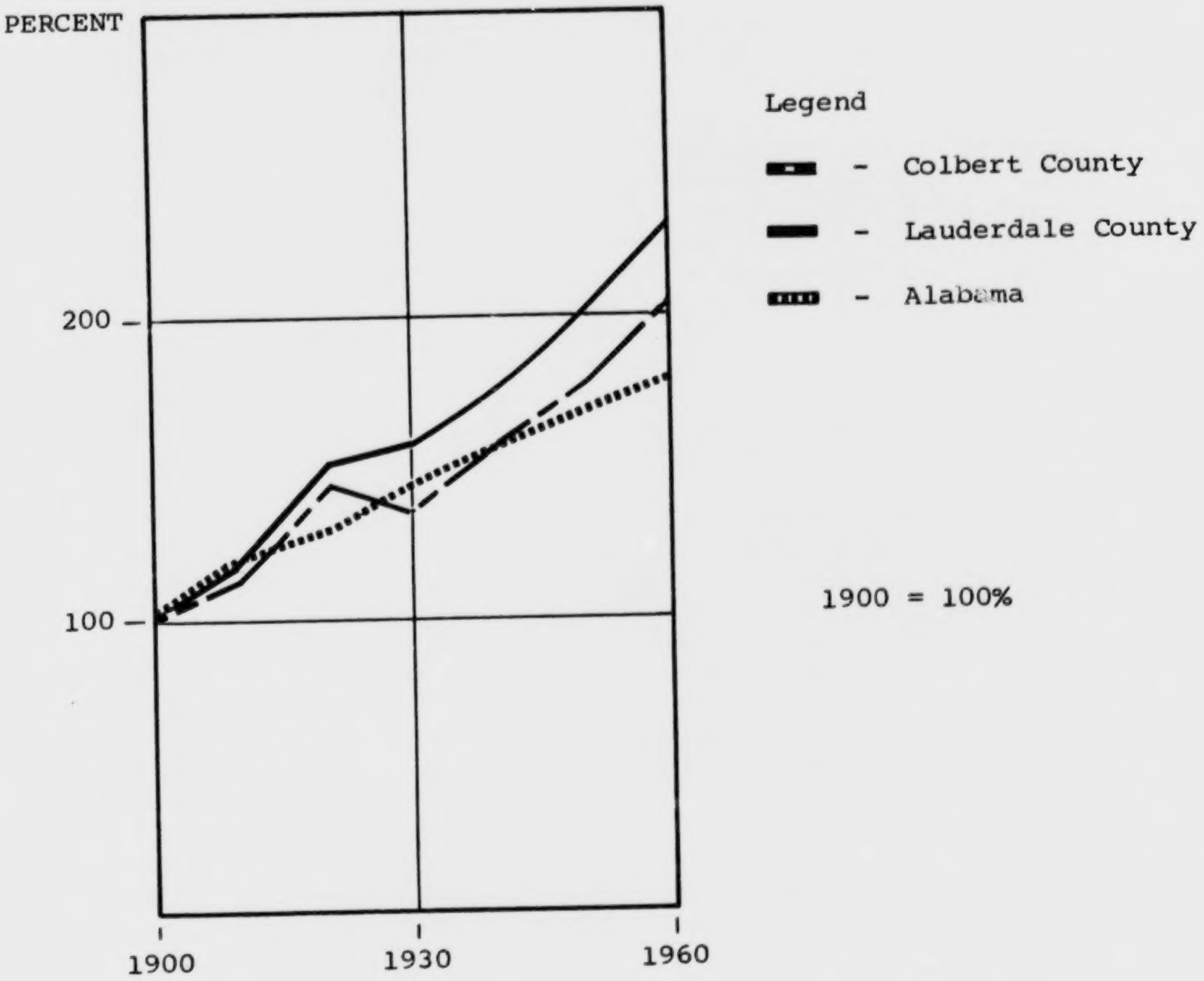
1900–1960

	Colbert County	Lauderdale County	Muscle Shoals Area	Alabama
1900	*22,341*	*26,559*	*48,900*	*1,828,697*
1910	*24,802*	*30,936*	*55,738*	*2,138,093*
percent change	*11.0*	*16.5*	*14.0*	*16.9*
1920	*31,997*	*39,556*	*71,553*	*1,348,174*
percent change	*29.0*	*27.9*	*28.4*	*9.8*
1930	*29,860*	*41,130*	*70,990*	*2,646,248*
percent change	*-6.7*	*4.0*	*-0.8*	*12.7*
1940	*34,093*	*46,230*	*80,323*	*2,832,961*
percent change	*14.2*	*12.4*	*13.1*	*7.1*
1950	*39,561*	*54,179*	*93,740*	*3,061,743*
percent change	*16.0*	*17.2*	*16.7*	*8.1*
1960	*46,506*	*61,622*	*108,128*	*3,266,740*
percent change	*17.6*	*13.7*	*15.3*	*6.7*

Source: U. S. Census of Population, 1900–1960.

CHART 1

POPULATION CHANGE FOR COLBERT AND LAUDERDALE COUNTIES AND ALABAMA
1900 - 1960



Between 1922 and 1931 many unsuccessful bills were introduced in Congress for Federal completion and operation of the Muscle Shoals properties. Finally, in 1933 a combination of bills providing for the establishment of the Tennessee Valley Authority, became law. Immediately, the TVA took control of the Government properties at Muscle Shoals for agricultural chemical experimentation. The local nitrate plants provided the basic facilities for research into the development of and the efficient production of fertilizers. Expansion of generating facilities supplied the area with an abundance of electrical power–power not only for TVA's fertilizer plants, but also for the economic development of the entire region. TVA quickly became the primary source of electricity for the urban communities and rural areas of the valley. Almost overnight, TVA became the major employer and principal generator of economic growth in the Muscle Shoals region. Expanding fertilizer research and development operations provided many additional job opportunities and the availability of low cost electrical power attracted other types of industry, particularly aluminum and chemicals.

The construction activity with TVA and the accompanying industrial expansion which began in 1933 quickly reversed the population outmigration pattern as new families again poured into the region. The 1940 Census of Population reflected the significant uptrend as Colbert County's growth rate increased to 14.2 percent and Lauderdale County's rate increased to 12.4 percent. Contrary to the relationship of the previous decade, during the thirties the Muscle Shoals region increased in population by 13.1 percent, while the State of Alabama's growth rate slowed to only 7.1 percent.

With the outbreak of World War II, a tremendous demand was created for production of primary aluminum. TVA power along with sufficient industrial land, water and good transportation facilities, made the Muscle Shoals region attractive for the production of this needed metal. Inspiration and support provided by Alabama's Senator Lister Hill contributed to the decision by the Reynolds Metals Company to locate its initial production facility at Listerhill, near the City of Muscle Shoals. Throughout the next decade, the Reynolds Company facilities expanded as the market for aluminum expanded. Consumption of aluminum and aluminum alloys by the transportation and construction industries attracted some of the larger industrial consumers to the reduction facilities in order to lower transportation costs. This was a major reason for Ford Motor Company locating a casting plant in the Muscle Shoals Area, near the Reynolds facility.

The growth in factory jobs plus the accompanying increase of jobs in service, trade, finance, utilities and government resulted in an accelerated rate of growth in population for the region during the next two decades which doubled the rate of growth of the State. Colbert County's rate of population growth consistently increased through the next two decades to 1960 as the southern bank of the river became the heavy industrial segment of the Muscle Shoals area. Lauderdale County continued to increase significantly during the next two decades as the population gained 17.2 percent between 1940 and 1950, and gained 13.7 percent between 1950 and 1960.

Thus, during the first sixty years of this century, the Muscle Shoals region experienced an increase of more than 120 percent in population, despite a temporary setback during the twenties, due mainly to the planned utilization of her many natural resources and especially the development of the Tennessee River.

TABLE 2

RURAL AND URBAN POPULATION FOR ALABAMA, COLBERT COUNTY, AND LAUDERDALE COUNTY

1950 and 1960

	1950				1960				1950–1960	
	NUMBER		PERCENT		NUMBER		PERCENT		PERCENT INCREASE	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Alabama	*1,720,806*	*1,340,937*	*56.3*	*43.7*	*1,475,019*	*1,791,721*	*45.2*	*54.8*	*-14.3*	*33.6*
Colbert County	*22,060*	*17,501*	*55.76*	*44.2*	*19,937*	*26,569*	*42.9*	*57.1*	*-9.6*	*51.8*
Lauderdale County	*30,300*	*23,879*	*55.9*	*44.1*	*29,973*	*31,649*	*48.6*	*51.4*	*-1.1*	*32.5*
Muscle Shoals Area	*52,360*	*41,380*	*55.8*	*44.2*	*49,910*	*58,218*	*46.1*	*53.9*	*-4.7*	*40.5*

Source: U. S. Census of Population, 1950–1960.

RURAL–URBAN DISTINCTION

The distinction between rural and urban areas in this study follows the definition adopted for the 1950 United States Census of Population. That is, urban areas were identified as those with 2,500 or more inhabitants. (The urban definition includes incorporated and unincorporated cities, towns, boroughs, and villages that have at least 2,500 inhabitants.) All other areas reviewed in this study are classified as rural.

Declining manpower needs in agriculture, coupled with a significant increase in non-agricultural activities in the quad-cities area, resulted in a notable shift from 44.2 percent urban in 1950 to nearly 54 percent urban in 1960. The rural population, during the same decade, decreased by 4.7 percent, while the urban population produced a significant increase of 40.5 percent. See Table 2.

Further evidence of the increasing urban population is presented in Table 3. Florence, Sheffield, Tuscumbia, and Muscle Shoals City are the primary population centers of the two-county area, and each witnessed substantial population increases during the decade. It should be noted that the above percentages understate the urbanization trend since the rural population includes those persons living outside of the corporate limits of the four principal cities, but oriented to the urban areas. When the rural non-farm population is added to the urban population, the total number of "urban-oriented" persons has grown from 65,428 or 70 percent of the region in 1950 to 94,807 or 88 percent of the region in 1960.

MIGRATION

A technique frequently used for analyzing the migration pattern of a given locale is to calculate the natural population increase during the decade (total births minus deaths); add the increase to the base period (1950) in order to determine the expected population ten years hence (1960). If the actual population exceeds the expected population, in-migration has occurred; but, if the actual population is less than the expected population, out-migration has taken place.

Table 4 is computed using the above defined procedure and indicates that during the last decade the Muscle Shoals area lost 3,503 persons due to out-migration. Colbert County experienced a gain of 488 white residents due to in-migration, however, this gain was more than offset by a loss of 933 out-migrating non-whites. Lauderdale County experienced out-migration losses of 1,723 whites and 1,335 non-whites during the decade for a net loss of 3,058 persons. A later section on population composition will describe in detail the characteristics of this migrating population.

Since 1960 the Muscle Shoals area has enjoyed an improved economic picture as many new jobs were created, thus, reducing the amount of out-migration.

TABLE 3

POPULATION OF ALL INCORPORATED PLACES
1950 and 1960

TOWN	COUNTY	POPULATION 1950	POPULATION 1960	Percent Increase or Decrease 1950–1960
Anderson	*Lauderdale*	–	–	–
Cherokee	*Colbert*	*748*	*1,349*	*80.3*
Florence	*Lauderdale*	*23,879*	*31,649*	*32.5*
Killen	*Lauderdale*	–	*620*	–
Leighton	*Colbert*	*1,080*	*1,158*	*7.2*
Lexington	*Lauderdale*	–	*315*	–
Littleville	*Colbert*	–	*460*	–
Muscle Shoals	*Colbert*	*1,937*	*4,084*	*110.8*
Rogersville	*Lauderdale*	*531*	*766*	*44.3*
Sheffield	*Colbert*	*10,767*	*13,491*	*25.3*
Tuscumbia	*Colbert*	*6,734*	*8,994*	*33.6*
Waterloo	*Lauderdale*	*327*	*215*	*-34.3*

Source: U. S. Census of Population, 1960.

TABLE 4

MIGRATION TRENDS BY RACE
COLBERT AND LAUDERDALE COUNTIES
1950–1960

	Colbert	Lauderdale	Muscle Shoals Area
White:			
1950 Population–	*31,238*	*46,926*	*78,164*
Natural population increase during the decade–	*5,798*	*9,152*	*14,950*
Expected 1960 Population–	*37,036*	*56,078*	*93,114*
Actual 1960 Population–	*37,524*	*54,355*	*91,879*
Population net change from migration–	*+488*	*-1,723*	*-1,235*
Non-White:			
1950 Population–	*8,323*	*7,253*	*15,576*
Natural population increase during the decade–	*1,592*	*1,349*	*2,941*
Expected 1960 Population–	*9,915*	*8,602*	*18,517*
Actual 1960 Population–	*8,982*	*7,267*	*16,249*
Population net change from migration–	*-933*	*-1,335*	*-2,268*
Total Population Net Loss from Out-Migration–	*455*	*3,058*	*3,503*

TOTAL BIRTHS LESS TOTAL DEATHS

Colbert:	*White*	*(8,257) - (2,459) = (5,798)*
	Non-White	*(2,648) - (1,056) = (1,592)*
Lauderdale:	*White*	*(12,371) - (3,219) = (9,152)*
	Non-White	*(2,228) - (879) = (1,349)*

TABLE 5

NATURAL INCREASE STATISTICS IN THE MUSCLE SHOALS AREA

1960–1966

	COLBERT COUNTY				LAUDERDALE COUNTY				MUSCLE SHOALS AREA			
	Births		Deaths		Births		Deaths		Births		Deaths	
Year	*white*	*non-white*	*white*	*non-white*	*white*	*non-white*	*white*	*non-white*	*white*	*non-white*	*white*	*non-white*
1960	*821*	*245*	*239*	*136*	*1276*	*211*	*371*	*89*	*2097*	*456*	*610*	*225*
1961	*821*	*247*	*298*	*101*	*1299*	*232*	*382*	*94*	*2120*	*479*	*680*	*195*
1962	*902*	*270*	*302*	*120*	*1343*	*223*	*377*	*78*	*2245*	*493*	*679*	*198*
1963	*871*	*266*	*363*	*98*	*1213*	*219*	*398*	*93*	*2084*	*485*	*761*	*191*
1964	*828*	*289*	*301*	*107*	*1194*	*227*	*453*	*76*	*2022*	*516*	*754*	*183*
1965	*798*	*225*	*322*	*99*	*1051*	*191*	*446*	*77*	*1849*	*416*	*768*	*176*
1966	*718*	*225*	*327*	*96*	*1172*	*218*	*410*	*105*	*1890*	*443*	*737*	*201*
TOTAL	*5759*	*1767*	*2152*	*757*	*8548*	*1521*	*2837*	*612*	*14307*	*3288*	*4989*	*1369*

Source: Alabama Department of Health – Bureau of Vital Statistics.

Table 5 reflects natural increase statistics for both Colbert and Lauderdale Counties since 1960. During the seven-year period 1960-1966, a net natural increase of 11,237 persons occurred; 9,318 white and 1,919 non-white. It is imperative that new job opportunities be created in the Muscle Shoals area at a significantly increased rate in order for the area to approach its potential. This will be mandatory to take care of the natural increase in population and, at the same time, reverse the out-migration trend.

REGIONAL MIGRATION

On the National scene the population is highly mobile with one-fifth of the nation changing residences every year. Much of this movement is from rural to urban areas, as in the Muscle Shoals region, and from economically depressed to more prosperous regions. The result has set in motion a national re-organization of both public and private institutions. Transportation and communications technology has completely changed methods of administration and distribution—thus significantly affecting plant and office location strategy. Technological advances have reduced manpower requirements in many traditional industries and at the same time created new employment opportunities in activities unheard of even a decade ago. Across-the-board upgrading in skills and talents have placed a greater burden on the educational process in total number of participants and in the time required for formal education. Increased time for leisure and longer life spans have combined with greater mobility to place greater emphasis on recreation activities and facilities.

While the exodus from certain southern states is still underway, the Southeastern region as a whole has now reversed the 1950-60 trend when a net of 151,000 persons left the area, to a 1960-64 net gain of 88,000. These regional migration trends are shown in Table 6. Generally, those southern states which had a larger surplus of farm labor (or a major loss in a basic industry such as coal mining) and whose degree of urbanization did not attract a significant in-migration from other regions of the nation, had the largest losses. In the 1950-60 period every southern state except Florida and Virginia had a net out-migration. During the early 1960's, however, Georgia, Arkansas and Tennessee reversed the trend and every southern state significantly reduced its net out-migration.

TABLE 6

AVERAGE ANNUAL NET TOTAL MIGRATION SOUTHERN STATES AND MAJOR REGIONS OF NATION 1950–60, 1960–64

	Number of Persons	
	1950–60	1960–64
Southeast:		
Florida	*162,000*	*100,000*
Virginia	*2,000*	*32,000*
Georgia	*- 21,000*	*15,000*
Arkansas	*- 43,000*	*10,000*
Tennessee	*- 27,000*	*7,000*
North Carolina	*- 33,000*	*- 3,000*
Louisiana	*- 5,000*	*- 5,000*
South Carolina	*- 22,000*	*- 8,000*
Mississippi	*- 43,000*	*- 8,000*
Alabama	*- 37,000*	*- 12,000*
Kentucky	*- 39,000*	*- 12,000*
West Virginia	*- 45,000*	*- 28,000*
Total Southeast	*-151,000*	*88,000*
West[1]	*374,000*	*388,000*
Northeast[2]	*53,000*	*111,000*
North Central[3]	*- 13,000*	*-226,000*
United States	*263,000*	*361,000*

[1] *The Western Region includes Oklahoma, Texas, Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska and Hawaii.*

[2] *The Northeast Region includes Delaware, Maryland, District of Columbia, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.*

[3] *The North Central Region includes Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.*

Source: Americans at Mid-Decade, U.S. Department of Commerce, Bureau of the Census.

LEVELS OF BIRTH RATE AND MORTALITY

Tables 7 and 8 reflect comparisons of birth rates and death rates by race for Colbert County, Lauderdale County, the State of Alabama, and the United States for the years 1950, 1960, 1965 and 1966. A declining trend in live births per 1,000 population is shown in the Muscle Shoals area for these selected years which closely parallels both State and National trends. However, the birth rates for each county are significantly lower than the National level.

Where birth and mortality rates are high, the proportion of children and young adults will be high, and the proportion of persons 60 years of age and older will be low. The opposite is so where birth and mortality rates are low, as in the Muscle Shoals area. Some implications of this phenomenon are discussed in detail in the next section on population composition.

COMPOSITION OF THE POPULATION

In the preceding section on migration trends, the age, sex and racial characteristics of the citizens of Colbert and Lauderdale Counties have been touched upon and partially reviewed. For the purpose of planning, it is now necessary that we take a closer look at the detailed characteristics of the people in order to ascertain an accurate analysis of the Muscle Shoals Area population. This is very important because these characteristics determine such things as employment, composition of the labor force, worker availability, school enrollment, consumption patterns, and so on. A thorough knowledge of the present social and economic structure is a necessary element in the overall planning program, and will aid and facilitate in the accomplishment of the desired goals.

Age Group Trends

Chart 2 illustrates age group trends of Colbert and Lauderdale Counties for the last two decades. One readily notes that population composition of both counties has been in a rapid state of flux. The general trend of both sexes has been toward a slight decrease in the proportion of children and a corresponding increase in the porportion of older residents. Improvements in the field of medicine resulting in a longer life span plus a lesser tendency to out-migrate characterize the older group. Significant reductions in the proportions of young adults in both counties resulted principally from out-migration to seek greater occupational opportunities. The decline in children also is directly related to this young adult out-migration as the proportion of women in the child-bearing age groups grows smaller. The out-migration of population in the most productive period of life is obviously an undesirable trend for any community. A comprehensive explanation of the above trends, along with a discussion of future population trends and their resulting ramifications, will follow in a later section entitled Future Prospects for the Muscle Shoals Area.

TABLE 7

LIVE BIRTHS AND LIVE BIRTH RATES BY RACE

(Rate per 1,000 Population)

	1950				1960			
		Rate				Rate		
	Number	*Total*	*White*	*Non-White*	*Number*	*Total*	*White*	*Non-White*
Colbert County	*1,072*	*27.0*	*25.5*	*32.8*	*1,066*	*22.8*	*21.8*	*27.2*
Lauderdale County	*1,442*	*26.1*	*35.6*	*32.2*	*1,487*	*24.1*	*23.4*	*29.0*
Alabama	*82,566*	*26.9*	*23.8*	*33.4*	*80,955*	*24.7*	*22.2*	*30.6*
United States	*3,631,512*	*24.1*	*23.0*	*33.3*	*4,257,850*	*23.7*	*22.7*	*32.1*

	1965				1966			
		Rate				Rate		
	Number	*Total*	*White*	*Non-White*	*Number*	*Total*	*White*	*Non-White*
Colbert County	*1,023*	*20.4*	*19.6*	*23.9*	*943*	*18.5*	*17.3*	*23.7*
Lauderdale County	*1,390*	*21.2*	*20.1*	*29.9*	*1,242*	*18.8*	*17.8*	*26.2*
Alabama	*70,589*	*20.3*	*18.1*	*25.5*	*66,455*	*18.9*	*17.2*	*23.1*
United States	*3,760,358*	*19.4*	*18.3*	*27.6*	*3,629,000*[a]	*18.5*[a]	_[b]	_[b]

[a] *Provisional. By place of occurrence.*

[b] *Not available.*

Source: Alabama Department of Health, Bureau of Vital Statistics, Montgomery, Alabama; U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the U.S. 1967, Washington, D.C.: Government Printing Office, 1967.

TABLE 8

DEATHS AND DEATH RATES BY RACE

(Rate per 1,000 Population)

	1950				1960			
		Rate				Rate		
	Number	Total	White	Non-White	Number	Total	White	Non-White
Colbert County	323	8.1	6.8	13.3	375	8.0	6.3	15.1
Lauderdale County	432	7.9	7.4	11.7	460	7.4	6.8	12.2
Alabama	26,753	8.7	7.4	11.4	30,304	9.3	8.3	11.5
United States	1,452,454	9.6	9.5	11.2	1,711,982	9.5	9.5	10.1

	1965				1966			
		Rate				Rate		
	Number	Total	White	Non-White	Number	Total	White	Non-White
Colbert County	421	8.4	7.9	10.5	423	8.3	7.9	10.1
Lauderdale County	523	8.0	7.7	10.5	515	7.8	7.0	14.4
Alabama	32,520	9.3	8.6	11.1	33,008	9.4	8.7	11.0
United States	1,828,136	9.4	9.4	9.6	1,869,000[a]	9.5[a]	_[b]	_[b]

[a] *Provisional. By place of occurence.*

[b] *Not available.*

Source: Alabama Department of Health, Bureau of Vital Statistics, Montgomery, Alabama; U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1967, Washington, D.C.: Government Printing Office, 1967.

CHART 2

AGE GROUPS IN THE POPULATION BY SEX
1940 - 1950 - 1960

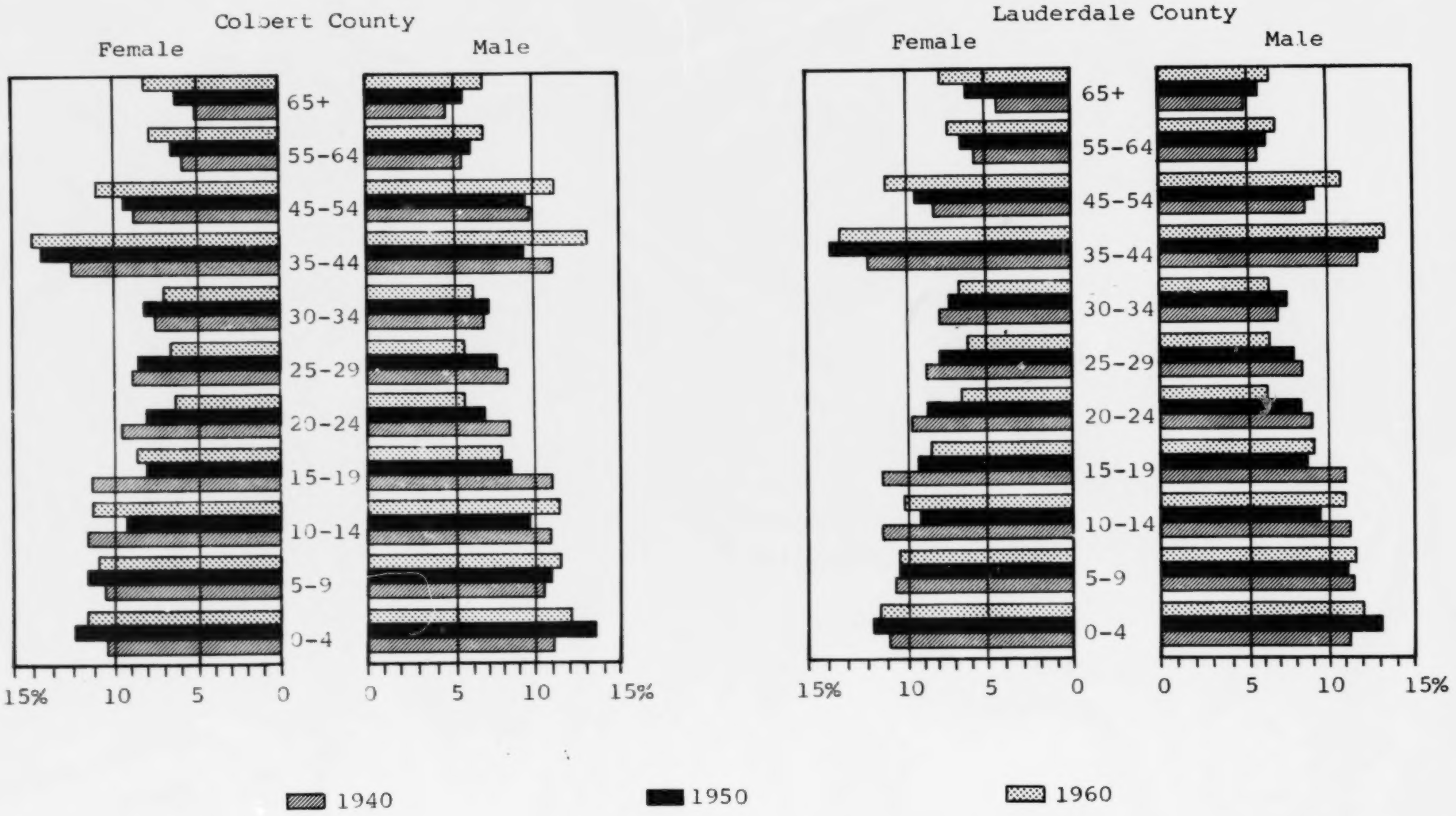


TABLE 9

DETAILED POPULATION CHARACTERISTICS
COLBERT COUNTY

Age Groups	1940		1950		1960		Percent Change 1940–60
	Number	Percent Distribution	Number	Percent Distribution	Number	Percent Distribution	
MALE							
Total	*16,845*	*100.0*	*19,494*	*100.0*	*22,807*	*100.0*	*35.4*
0–4	*1,819*	*10.8*	*2,579*	*13.2*	*2,795*	*12.3*	*53.7*
5–9	*1,835*	*10.9*	*2,200*	*11.3*	*2,697*	*11.8*	*47.0*
10–14	*1,847*	*11.0*	*1,922*	*9.9*	*2,650*	*11.6*	*43.5*
15–19	*1,854*	*11.0*	*1,633*	*8.4*	*1,885*	*8.3*	*1.7*
20–24	*1,451*	*8.6*	*1,301*	*6.7*	*1,261*	*5.5*	*-13.1*
25–29	*1,404*	*8.3*	*1,481*	*7.6*	*1,307*	*5.7*	*-6.9*
30–34	*1,188*	*7.1*	*1,439*	*7.4*	*1,485*	*6.5*	*25.0*
35–39	*1,091*	*6.5*	*1,500*	*7.7*	*1,553*	*6.8*	*42.3*
40–44	*866*	*5.1*	*1,283*	*6.6*	*1,496*	*6.6*	*72.7*
45–49	*855*	*5.1*	*1,015*	*5.2*	*1,403*	*6.2*	*64.1*
50–54	*793*	*4.7*	*812*	*4.2*	*1,143*	*5.0*	*44.1*
55–59	*588*	*3.5*	*681*	*3.5*	*931*	*4.1*	*58.3*
60–64	*449*	*2.7*	*557*	*2.9*	*693*	*3.0*	*54.3*
65+	*805*	*4.8*	*1,091*	*5.6*	*1,518*	*6.7*	*88.6*
FEMALE							
Total	*17,248*	*100.0*	*20,067*	*100.0*	*23,699*	*100.0*	*37.4*
0–4	*1,766*	*10.2*	*2,436*	*12.1*	*2,608*	*11.0*	*47.7*
5–9	*1,812*	*10.5*	*2,200*	*11.0*	*2,527*	*10.7*	*39.5*
10–14	*1,875*	*10.9*	*1,867*	*9.3*	*2,554*	*10.8*	*36.2*
15–19	*1,917*	*11.1*	*1,599*	*8.0*	*1,993*	*8.4*	*4.0*
20–24	*1,657*	*9.6*	*1,587*	*7.9*	*1,425*	*6.0*	*-14.0*
25–29	*1,480*	*8.6*	*1,699*	*8.5*	*1,517*	*6.4*	*2.5*
30–34	*1,292*	*7.5*	*1,624*	*8.1*	*1,641*	*6.9*	*27.0*
35–39	*1,122*	*6.5*	*1,492*	*7.4*	*1,672*	*7.1*	*49.0*
40–44	*970*	*5.6*	*1,227*	*6.1*	*1,590*	*6.7*	*63.9*
45–49	*883*	*5.1*	*1,013*	*5.0*	*1,381*	*5.8*	*56.4*
50–54	*697*	*4.0*	*877*	*4.4*	*1,185*	*5.0*	*70.0*
55–59	*535*	*3.1*	*664*	*3.3*	*964*	*4.1*	*80.2*
60–64	*417*	*2.4*	*598*	*3.0*	*782*	*3.3*	*87.5*
65+	*825*	*4.8*	*1,184*	*5.9*	*1,860*	*7.8*	*125.4*
Total Population	*34,093*		*39,561*		*46,506*		*36.4*

Source: U.S. Census of Population.

TABLE 10

DETAILED POPULATION CHARACTERISTICS
LAUDERDALE COUNTY

Age Groups	1940		1950		1960		Percent Change 1940–60
	Number	Percent Distribution	Number	Percent Distribution	Number	Percent Distribution	
MALE							
Total	*22,854*	*100.0*	*26,698*	*100.0*	*30,262*	*100.0*	*32.4*
0–4	*2,553*	*11.2*	*3,454*	*12.9*	*3,670*	*12.1*	*43.8*
5–9	*2,592*	*11.3*	*2,890*	*10.8*	*3,496*	*11.6*	*34.9*
10–14	*2,633*	*11.5*	*2,569*	*9.6*	*3,303*	*10.9*	*25.4*
15–19	*2,467*	*10.8*	*2,382*	*8.9*	*2,747*	*9.1*	*11.3*
20–24	*2,066*	*9.0*	*2,200*	*8.2*	*1,954*	*6.5*	*-5.4*
25–29	*1,871*	*8.2*	*2,093*	*7.8*	*1,811*	*6.0*	*-3.2*
30–34	*1,592*	*7.0*	*1,991*	*7.5*	*1,919*	*6.3*	*20.5*
35–39	*1,399*	*6.1*	*1,777*	*6.7*	*2,038*	*6.7*	*45.7*
40–44	*1,177*	*5.2*	*1,686*	*6.3*	*1,930*	*6.4*	*64.0*
45–49	*1,097*	*4.8*	*1,319*	*4.9*	*1,711*	*5.7*	*56.0*
50–54	*910*	*4.0*	*1,098*	*4.1*	*1,593*	*5.3*	*75.1*
55–59	*769*	*3.4*	*1,001*	*3.7*	*1,150*	*3.8*	*49.5*
60–64	*604*	*2.7*	*742*	*2.8*	*926*	*3.1*	*52.3*
65+	*1,120*	*4.9*	*1,496*	*5.6*	*2,014*	*6.7*	*79.8*
FEMALE							
Total	*23,376*	*100.0*	*27,481*	*100.0*	*31,350*	*100.0*	*34.1*
0–4	*2,545*	*10.9*	*3,194*	*11.6*	*3,590*	*11.5*	*41.1*
5–9	*2,437*	*10.4*	*2,828*	*10.3*	*3,236*	*10.3*	*32.8*
10–14	*2,605*	*11.1*	*2,577*	*9.4*	*3,151*	*10.1*	*21.0*
15–19	*2,583*	*11.0*	*2,500*	*9.1*	*2,660*	*8.5*	*3.0*
20–24	*2,270*	*9.7*	*2,399*	*8.7*	*2,134*	*6.8*	*-6.0*
25–29	*1,938*	*8.3*	*2,232*	*8.1*	*1,952*	*6.2*	*0.7*
30–34	*1,845*	*7.9*	*2,061*	*7.5*	*2,163*	*6.9*	*17.2*
35–39	*1,561*	*6.7*	*1,942*	*7.1*	*2,116*	*6.7*	*35.6*
40–44	*1,209*	*5.2*	*1,803*	*6.6*	*2,072*	*6.6*	*71.4*
45–49	*1,103*	*4.7*	*1,440*	*5.2*	*1,813*	*5.8*	*64.4*
50–54	*892*	*3.8*	*1,127*	*4.1*	*1,663*	*5.3*	*86.4*
55–59	*713*	*3.1*	*978*	*3.6*	*1,305*	*4.2*	*83.0*
60–64	*597*	*2.6*	*758*	*2.8*	*1,052*	*3.4*	*76.2*
65+	*1,078*	*4.6*	*1,642*	*6.0*	*2,453*	*7.8*	*127.6*
Total Population	*46,230*		*54,179*		*61,622*		*33.3*

Source: U.S. Census of Population.

Sex Composition

For the past two decades females, in practically every age group, have out-numbered males. Also, as shown in Table 11, the proportion of females, relative to total population, has increased each decade since 1950 in both Colbert and Lauderdale Counties.

TABLE 11

PERCENT OF MALES AND FEMALES IN RELATION TO TOTAL POPULATION, COLBERT AND LAUDERDALE COUNTIES

	COLBERT COUNTY			LAUDERDALE COUNTY		
	1940	1950	1960	1940	1950	1960
Male	*49.4*	*49.3*	*49.0*	*49.4*	*49.3*	*49.1*
Female	*50.6*	*50.7*	*51.0*	*50.6*	*50.7*	*50.9*
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

In explanation, other than the possibility of an excess of female over male births, there are two factors which may account for this trend: (1) women have a tendency to live longer than men, e.g., note the predominance of females over males in the 65 and over age group, especially in 1960, and (2) generally, men are somewhat more inclined to out-migrate in search of better economic opportunity.

Racial Composition

A significant declining trend has been experienced in both Colbert and Lauderdale Counties in the proportion of non-whites relative to total population. Table 12 indicates that non-whites declined from 25.2 percent of the population in 1940 to only 19.3 percent in 1960. Lauderdale County's relative proportions of non-whites declined from 16.1 percent to 11.8 percent between 1940 and 1960.

TABLE 12

PROPORTIONS OF WHITES AND NON-WHITES TO TOTAL POPULATION, COLBERT AND LAUDERDALE COUNTIES

	COLBERT COUNTY			LAUDERDALE COUNTY		
	1940	1950	1960	1940	1950	1960
White	74.8	79.0	80.7	83.9	86.6	88.2
Non-White	25.2	21.0	19.3	16.1	13.4	11.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

In 1940, as shown by Table 13, 31.6 percent of Colbert County's non-white population was under 15 years of age and 8.0 percent was 60 years of age or older. By 1960, the percentage under 15 years of age had increased to 39.2 percent and the percentage for 60 or older increased to 11.5 percent.

TABLE 13

PERCENT DISTRIBUTION BY AGE OF NON-WHITES, COLBERT COUNTY

	1940			1950			1960		
Age Group	Total	Male	Female	Total	Male	Female	Total	Male	Female
0–14	31.6	32.7	30.6	34.9	36.7	33.2	39.2	41.4	37.3
15-59	60.4	58.6	62.0	56.1	54.6	57.6	49.3	47.6	50.7
60 & over	8.0	8.7	7.4	9.0	8.7	9.2	11.5	11.0	12.0

Similarly, as indicated in Table 16, Lauderdale County's non-white population contained 31.8 percent 14 years old or less and 8.2 percent age 60 or older in 1940. By 1960 these relative proportions had increased to 38.6 percent under age 15 and 12.6 percent age 60 or older.

TABLE 14

DETAILED NON-WHITE POPULATION CHARACTERISTICS
COLBERT COUNTY

	1940		1950		1960		
Age Groups	Number	Percent Distribution	Number	Percent Distribution	Number	Percent Distribution	Percent Change 1940–60
MALE							
Total	*4,062*	*100.0*	*3,966*	*100.0*	*4,209*	*100.0*	*3.6*
0–4	*408*	*10.0*	*588*	*14.8*	*603*	*14.3*	*47.8*
5–9	*463*	*11.4*	*460*	*11.6*	*595*	*14.1*	*28.5*
10–14	*456*	*11.2*	*408*	*10.3*	*545*	*12.9*	*19.5*
15–19	*486*	*12.0*	*395*	*10.0*	*376*	*8.9*	*-22.6*
20–24	*351*	*8.6*	*260*	*6.6*	*211*	*5.0*	*-39.9*
25–29	*296*	*7.3*	*264*	*6.7*	*210*	*5.0*	*-29.1*
30–34	*255*	*6.3*	*224*	*5.6*	*184*	*4.4*	*-27.8*
35–39	*262*	*6.5*	*270*	*6.8*	*217*	*5.2*	*-17.2*
40–44	*200*	*4.9*	*237*	*6.0*	*223*	*5.3*	*11.5*
45–49	*214*	*5.3*	*209*	*5.3*	*197*	*4.7*	*-7.9*
50–54	*193*	*4.8*	*167*	*4.2*	*196*	*4.7*	*1.6*
55–59	*123*	*3.0*	*139*	*3.5*	*187*	*4.4*	*52.0*
60–64	*108*	*2.7*	*90*	*2.3*	*125*	*3.0*	*15.7*
65+	*247*	*6.1*	*255*	*6.4*	*340*	*8.1*	*37.7*
Percent Male	*47.4*		*47.7*		*46.9*		
FEMALE							
Total	*4,518*	*100.0*	*4,357*	*100.0*	*4,773*	*100.0*	*5.6*
0–4	*420*	*9.3*	*563*	*12.9*	*596*	*12.5*	*41.9*
5–9	*465*	*10.3*	*472*	*10.8*	*608*	*12.7*	*30.8*
10–14	*493*	*10.9*	*411*	*9.4*	*577*	*12.1*	*17.0*
15–19	*491*	*10.9*	*383*	*8.8*	*403*	*8.4*	*-17.9*
20–24	*441*	*9.8*	*350*	*8.0*	*255*	*5.3*	*-42.2*
25–29	*394*	*8.7*	*335*	*7.7*	*254*	*5.3*	*-35.5*
30–34	*326*	*7.2*	*312*	*7.2*	*265*	*5.6*	*-18.7*
35–39	*327*	*7.2*	*310*	*7.1*	*298*	*6.2*	*-8.9*
40–44	*254*	*5.6*	*235*	*5.4*	*267*	*5.6*	*5.1*
45–49	*246*	*5.4*	*243*	*5.6*	*250*	*5.2*	*1.6*
50–54	*191*	*4.2*	*207*	*4.8*	*218*	*4.6*	*14.1*
55–59	*135*	*3.0*	*134*	*3.1*	*210*	*4.4*	*55.6*
60–64	*109*	*2.4*	*122*	*2.8*	*155*	*3.2*	*42.2*
65+	*226*	*5.0*	*280*	*6.4*	*417*	*8.7*	*84.5*
Percent Female	*52.6*		*52.3*		*53.1*		
Total Population	*8,580*		*8,323*		*8,982*		*4.7*

Source: U.S. Census of Population.

TABLE 15

DETAILED NON-WHITE POPULATION CHARACTERISTICS
LAUDERDALE COUNTY

Age Groups	1940 Number	1940 Percent Distribution	1950 Number	1950 Percent Distribution	1960 Number	1960 Percent Distribution	Percent Change 1940–60
MALE							
Total	*3,546*	*100.0*	*3,442*	*100.0*	*3,458*	*100.0*	*-2.5*
0–4	*361*	*10.2*	*471*	*13.7*	*516*	*14.9*	*42.9*
5–9	*401*	*11.3*	*371*	*10.8*	*513*	*14.8*	*27.9*
10–14	*387*	*10.9*	*358*	*10.4*	*403*	*11.7*	*4.1*
15–19	*416*	*11.7*	*322*	*9.4*	*306*	*8.8*	*-26.4*
20–24	*350*	*9.9*	*234*	*6.8*	*187*	*5.4*	*-46.6*
25–29	*266*	*7.5*	*216*	*6.3*	*152*	*4.4*	*-42.9*
30–34	*198*	*5.6*	*239*	*6.9*	*150*	*4.3*	*-24.2*
35–39	*212*	*6.0*	*193*	*5.6*	*170*	*4.9*	*-19.8*
40–44	*184*	*5.2*	*211*	*6.1*	*181*	*5.2*	*-1.6*
45–49	*172*	*4.9*	*162*	*4.7*	*169*	*4.9*	*-1.7*
50–54	*159*	*4.5*	*147*	*4.3*	*161*	*4.7*	*1.3*
55–59	*130*	*3.7*	*144*	*4.2*	*143*	*4.1*	*10.0*
60–64	*98*	*2.8*	*106*	*3.1*	*107*	*3.1*	*9.2*
65+	*212*	*6.0*	*268*	*7.8*	*300*	*8.7*	*41.5*
Percent Male	*47.5*		*47.5*		*47.5*		
FEMALE							
Total	*3,920*	*100.0*	*3,811*	*100.0*	*3,809*	*100.0*	*-2.8*
0–4	*395*	*10.1*	*457*	*12.0*	*527*	*13.8*	*33.4*
5–9	*417*	*10.6*	*420*	*11.0*	*434*	*11.4*	*4.1*
10–14	*415*	*10.6*	*355*	*9.3*	*411*	*10.8*	*-1.0*
15–19	*438*	*11.2*	*362*	*9.5*	*337*	*8.8*	*-23.1*
20–24	*378*	*9.6*	*294*	*7.7*	*225*	*5.9*	*-40.5*
25–29	*334*	*8.5*	*261*	*6.8*	*194*	*5.1*	*-41.9*
30–34	*295*	*7.5*	*248*	*6.5*	*199*	*5.2*	*-32.5*
35–39	*263*	*6.7*	*301*	*7.9*	*178*	*4.6*	*-32.3*
40–44	*234*	*6.0*	*238*	*6.2*	*231*	*6.1*	*-1.3*
45–49	*200*	*5.1*	*199*	*5.2*	*222*	*5.8*	*11.0*
50–54	*137*	*3.5*	*174*	*4.6*	*187*	*4.9*	*36.5*
55–59	*109*	*2.8*	*139*	*3.6*	*153*	*4.0*	*40.4*
60–64	*86*	*2.2*	*90*	*2.4*	*156*	*4.1*	*81.4*
65+	*219*	*5.6*	*273*	*7.2*	*355*	*9.3*	*62.1*
Percent Female	*52.5*		*52.5*		*52.4*		
Total Population	*7,466*		*7,253*		*7,267*		*-2.7*

Source: U.S. Census of Population.

TABLE 16

PERCENT DISTRIBUTION BY AGE OF NON-WHITES, LAUDERDALE COUNTY

	1940			1950			1960		
Age Group	Total	Male	Female	Total	Male	Female	Total	Male	Female
0–14	*31.8*	*32.4*	*31.3*	*33.5*	*34.9*	*32.3*	*38.6*	*41.4*	*36.0*
15–59	*60.0*	*58.9*	*60.9*	*56.3*	*54.2*	*58.2*	*48.8*	*46.8*	*50.6*
60 & over	*8.2*	*8.7*	*7.8*	*10.2*	*10.9*	*9.5*	*12.6*	*11.8*	*13.4*

One very significant implication of the changing racial composition in the Muscle Shoals Area is that young non-white persons, particularly males, in their most productive period of life are out-migrating apparently in search of better economic opportunity. In addition to the loss of badly needed human resources, the net result of this out-migration is to increase the proportion of very young and old persons as a liability to be cared for by the productive segment of the population.

Occupational Characteristics

An analysis of occupational characteristics can serve as a general measure of the economic status of the population of an area. Table 17 presents occupational characteristics for both Colbert and Lauderdale Counties by sex for the years 1950 and 1960. Occupations are listed by eleven occupational groups as established by the U.S. Bureau of the Census. While occupational statistics provide meaningful trends in work habits of residents of a given area, it should be noted that these data are tabulated by the Bureau of the Census on the basis of place of residence and do not take into account persons who in-commute for their livlihood but include those who out-commute. In a later section, employment trends will be reviewed which are compiled on the basis of place of employment and include those persons who in-commute while excluding out-commuters.

Substantial gains occurred in total workers of both sexes in Colbert and Lauderdale Counties between 1950 and 1960, as discussed previously. However, noteworthy internal changes occurred in several occupational groups. In line with National trends in increased technology and the decline in demand for unskilled workers, Colbert County experienced a drop in the non-farm laboring group while only a slight increase occurred in Lauderdale County. The trend to more mechanized farming methods and the great exodus of workers away from farms produced a significant impact on the Muscle Shoals area as these occupational groups experienced the greatest decline.

TABLE 17

OCCUPATIONAL CHARACTERISTICS, COLBERT AND LAUDERDALE COUNTIES BY SEX, 1950–1960

	COLBERT COUNTY						LAUDERDALE COUNTY					
	1950			1960			1950			1960		
OCCUPATIONAL GROUP	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*
Professional, Technical & kindred workers	946	572	374	1,335	766	569	1,319	739	580	1,946	1,229	717
Farmers & Farm Managers	1,469	1,454	15	416	416	0	3,160	3,122	38	1,181	1,100	81
Managers, Officials & Proprietors, except Farm	892	779	113	1,186	1,014	172	1,200	1,041	159	1,704	1,434	270
Clerical & kindred workers	936	394	542	1,422	435	987	1,279	465	814	1,879	649	1,230
Sales Workers	640	410	230	870	484	386	1,129	722	407	1,413	915	498
Craftsmen, Foremen & kindred workers	1,855	1,841	14	2,703	2,691	12	2,385	2,351	34	3,062	3,002	60
Operatives & kindred workers	2,052	1,865	187	3,079	2,800	279	2,813	2,195	618	3,701	3,073	628
Private Household Workers	448	12	436	577	8	569	667	41	626	887	12	875
Service Workers, except Private Household	746	349	397	1,154	446	708	923	453	470	1,484	634	850
Farm Laborers & Foremen	1,499	1,081	418	566	561	5	1,804	1,345	459	700	514	186
Laborers except Farm & Mine	1,064	1,041	23	969	962	7	1,223	1,194	29	1,312	1,293	19
Occupation not reported	124	96	28	240	156	84	138	95	43	495	270	225
TOTAL EMPLOYED	12,671	9,894	2,777	14,517	10,739	3,778	18,040	18,040	4,277	19,764	14,125	5,639

Source: U.S. Census of Population.

The heaviest gains occurred in the craftsmen, foremen and kindred workers and the operatives and kindred workers groups due to growth of the factory segment in the area and particularly in Colbert County.

A general trend toward higher class occupations clearly exists within the Muscle Shoals Area as evidenced by significant increases in professional and managerial type occupations for both men and women and clerical and service (except private household) occupations also for both sexes. Corresponding decreases in employment in farming occupations indicate a more diversified employment base which will result in an improved and higher paid labor force. Automation of farms; the aluminum, rubber and chemical industries; and the influence of TVA are seen as the primary causes of this trend. As the occupational characteristics continue this trend, a better trained and better paid labor force will result.

INCOME, EDUCATION AND HOUSING

In the preceding sections we have analyzed the changing face of the Muscle Shoals Area's population. In the following section we shall analyze these very important interrelated qualitative aspects (income, education, and housing) which, more than any other, determine the style and standard of living to be enjoyed by the citizens of both Colbert and Lauderdale Counties.

The first step in planning effectively for community improvement is to recognize and acknowledge the existence of community problems and deficiencies. In order to accomplish this, the strengths and weaknesses of each of these social and economic aspects of community life will be brought to light, evaluated, and emphasized.

Income

As shown in Table 18, in 1949, 22.5 percent of the families in Colbert County and 29.1 percent in Lauderdale County subsisted on annual incomes under $1,000, and 62.8 percent and 68.3 percent of families in Colbert and Lauderdale Counties, respectively, subsisted on annual incomes under $3,000. Moreover, only 34.6 percent of Colbert's families and only 26.9 percent of Lauderdale's families had incomes ranging from $3,000 to $7,000 a year. A comparison of median family incomes shows that Lauderdale County with $2,002, was almost $290 behind Colbert County with $2,289.

From 1949 to 1959, large improvements were realized in family income levels. Table 18 shows that the percentage of families in Colbert County with annual incomes less than $1,000 had fallen to 10.7 percent, and families with annual incomes less than $3,000 had fallen to 31.4 percent. Lauderdale County also experienced comparable improvement as families with incomes less than $1,000 dropped to only 11.5 percent and those reporting less than $3,000 in annual incomes fell to 35.5 percent. Unfortunately, the percentage of families with annual incomes ranging from $3,000 to $7,000 increased only slightly in both counties as Colbert rose to 43.2 percent and Lauderdale rose to 41.5 percent of all families.

TABLE 18

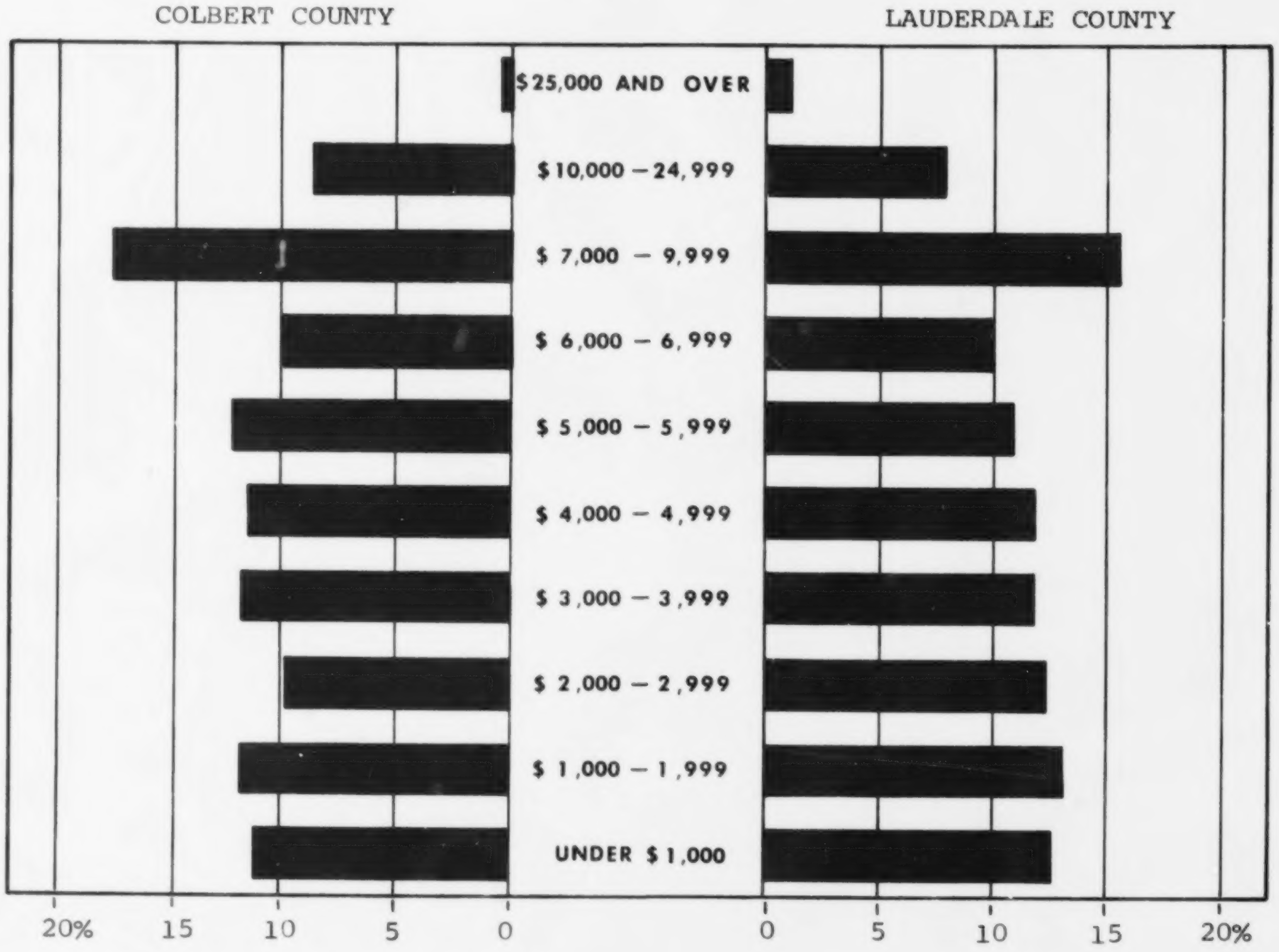
FAMILY INCOME DISTRIBUTION
COLBERT AND LAUDERDALE COUNTIES

		COLBERT COUNTY		LAUDERDALE COUNTY	
INCOME LEVEL		Families	% of total Families	Families	% of total Families
All Families	*1949*	*(9,780)*	*100.0*	*(14,035)*	*100.0*
Under $1,000		*2,205*	*22.5*	*4,085*	*29.1*
1,000–1,999		*1,920*	*19.6*	*2,770*	*19.7*
2,000–2,999		*2,020*	*20.6*	*2,725*	*19.4*
3,000–3,999		*1,715*	*17.5*	*1,850*	*13.2*
4,000–4,999		*775*	*7.9*	*1,085*	*7.7*
5,000–5,999		*655*	*6.7*	*585*	*4.2*
6,000–6,999		*240*	*2.5*	*255*	*1.8*
7,000–9,999		*175*	*1.8*	*220*	*1.6*
10,000 & over		*145*	*1.5*	*145*	*1.0*
Income not reported		*170*	*1.7*	*315*	*2.2*
Percent under $3,000		–	*62.8*	–	*68.3*
Percent $3,000–$7,000		–	*34.6*	–	*26.9*
Median Family Income			*$2,289*		*$2,002*
(in 1959 dollars)			*$2,758*		*$2,412*
All Families	*1959*	*(11,751)*	*100.0*	*(15,678)*	*100.0*
Under $1,000		*1,255*	*10.7*	*1,806*	*11.5*
1,000–1,999		*1,313*	*11.2*	*1,971*	*12.6*
2,000–2,999		*1,117*	*9.5*	*1,782*	*11.4*
3,000–3,999		*1,303*	*11.1*	*1,694*	*10.8*
4,000–4,999		*1,268*	*10.8*	*1,689*	*10.8*
5,000–5,999		*1,373*	*11.7*	*1,626*	*10.4*
6,000–6,999		*1,132*	*9.6*	*1,484*	*9.5*
7,000–9,999		*1,965*	*16.7*	*2,351*	*15.0*
10,000–24,999		*988*	*8.4*	*1,154*	*7.4*
25,000 & over		*37*	*0.3*	*121*	*0.8*
Percent under $3,000		–	*31.4*	–	*35.5*
Percent $3,000–$7,000			*43.2*		*41.5*
Median Family Income			*$4,700*		*$4,347*

Source: U.S. Census of Population, 1950 and 1960.

CHART 3

DISTRIBUTION OF FAMILY INCOME
COLBERT AND LAUDERDALE COUNTIES
1959



Again comparing median family incomes, it can be seen in Table 18 that during the decade from 1949 to 1959, both counties experienced gains in excess of $2,000. Also, as seen in Chart 4, Colbert County's median family income of $4,700 was $353 more than Lauderdale County's, and $763 more than the Alabama average, but, fell short of the comparable income measure for the United States by $960. Therefore, while it is true that large improvement was made from 1949 to 1959, and consequently fewer families were having to subsist on inadequate incomes, it is likewise true that the Muscle Shoals Area still has room for improvement.

It should, however, be pointed out before passing, that the gains realized were unfortunately not as large as they may have appeared. Due to inflation, and the accompanying reduction in the purchasing power of the dollar, approximately 1/4 of this increase was negated. Returning to Table 18, there is an evaluation of the 1949 median family income for both Colbert and Lauderdale Counties in terms of 1959 dollars. From this, it can be seen that, in terms of purchasing power, the increase from 1949 to 1959 was really only $1,942 in Colbert County, and $1,935 in Lauderdale County as opposed to $2,411 and $2,345, respectively, when measured in terms of total dollars.

Non-White Income Comparison

Although income data are not available to establish trends in non-white families of the Muscle Shoals Area, it is, however, possible to compare non-white family incomes with total family incomes in each county and thereby observe and evaluate differences. As shown in Table 19, of the total non-white families in Colbert County in 1959, 19.4 percent had incomes under $1,000, and 56.9 percent had family incomes of less than $3,000. Moreover, only 35.0 percent of Colbert's non-white families had incomes ranging from $3,000 to $7,000. In Lauderdale County, the distribution of income for non-whites was even worse, as 21.3 percent of the non-white families had incomes of less than $1,000, and a full 2/3 had incomes of less than $3,000. Additionally, only 29.9 percent of Lauderdale's non-white families had incomes in the range $3,000 to $7,000. One can readily see that a wide gulf exists between white and non-white family incomes in both Colbert and Lauderdale Counties. A comparison of median family incomes further emphasizes this gulf, and shows that median family income for non-white families in Colbert County, at $2,554, is $2,146 less than median family income for the County as a whole. Lauderdale County's median family income for non-whites, at $2,072, is $2,275 less than median family income for the County as a whole.

In terms of economics, this means the non-white segment of the population in both Colbert and Lauderdale Counties, is exerting a drag on the economy. If these income levels could be raised, it would serve to increase purchasing power, broaden the tax base, etc., and in the long run increase community prosperity, and thereby benefit the entire Muscle Shoals Area.

TABLE 19

NON-WHITE FAMILY INCOME DISTRIBUTION COLBERT AND LAUDERDALE COUNTIES,

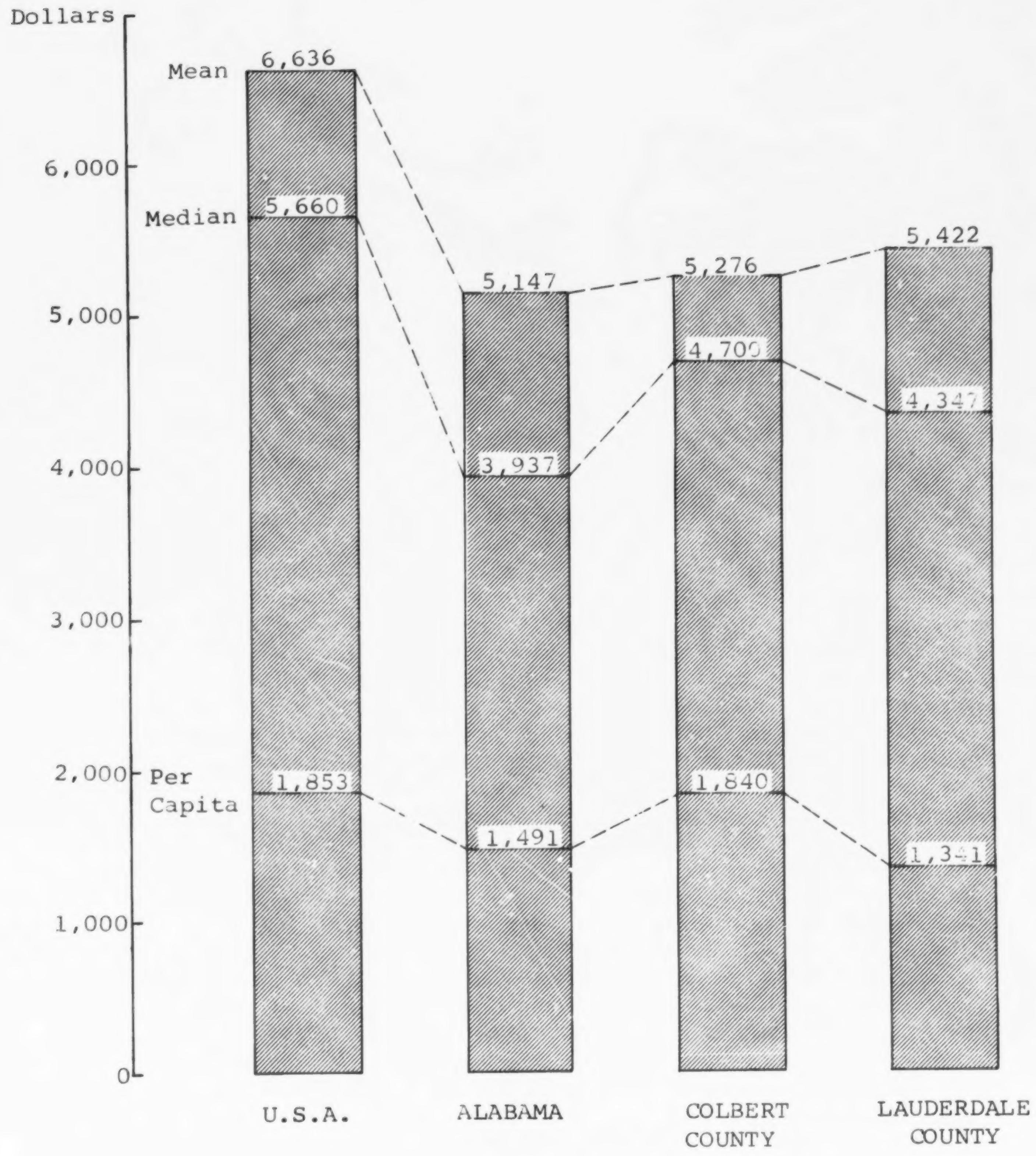
1959

INCOME LEVEL	COLBERT COUNTY		LAUDERDALE COUNTY	
	Number of Families	% of total Families	Number of Families	% of total Families
Under $1,000	*354*	*19.4*	*346*	*21.3*
1,000–1,999	*399*	*21.9*	*444*	*27.4*
2,000–2,999	*285*	*15.6*	*291*	*17.9*
3,000–3,999	*193*	*10.6*	*195*	*12.0*
4,000–4,999	*189*	*10.4*	*156*	*9.6*
5,000–5,999	*158*	*8.7*	*84*	*5.2*
6,000–6,999	*96*	*5.3*	*50*	*3.1*
7,000–7,999	*96*	*5.3*	*22*	*1.4*
8,000–8,999	*40*	*2.2*	*12*	*0.7*
9,000–9,999	*4*	*0.2*	*9*	*0.6*
10,000 & over	*8*	*0.4*	*13*	*0.8*
Total Families	*1,822*	*100.0*	*1,622*	*100.0*
Percent under $3,000	–	*56.9*	–	*66.6*
Percent $3,000–$7,000	–	*35.0*	–	*29.9*
Median Family Income		*$2,554*		*$2,072*

Source: U.S. Census of Population, 1960.

CHART 4

COMPARATIVE 1959 INCOME MEASURES



Income Distribution

There are three measures commonly used to measure income of a given area. They are:

> *Mean Family Income – the total income of all families divided by the total families.*
>
> *Median Family Income – the point at which half the families had more and half the families had less income.*
>
> *Per Capita Income – the total income of all families and individuals divided by the total population.*

Chart 4 illustrates and compares the above defined measures for Colbert and Lauderdale Counties, Alabama, and the United States. In terms of mean family income, Lauderdale County at $5,422 is second only to the United States with $6,636, followed by Colbert County with $5,276 and Alabama with $5,147. However; in terms of median family income, Lauderdale with $4,347 is third behind the United States with $5,660 and Colbert County with $4,700. A comparison of per capita income shows Lauderdale County with $1,341 to be in fourth place behind the United States with $1,853, Colbert County with $1,840 and Alabama with $1,491.

One method used for evaluating income distribution is to note the span between mean and median income. A large span indicates an uneven distribution of wealth in which a large percent of the total income is concentrated in the hands of a few. In contrast, the smaller the span the more equal the distribution of income. The distribution of income is a very important factor in terms of community growth and prosperity. Those with high incomes, as a rule, have a lower propensity for consumption than do those with low or average incomes, and consequently have a large percentage of their capital tied up in outside interest and activities. This is not to say that those with large incomes spend less, for this certainly is not the case; but rather, they spend a smaller percentage of their income. In contrast, those with low or average incomes have a tendency toward a high propensity to consume, thereby affording a rapid circulation of income, resulting in increased economic activity and prosperity for the entire community. In other words, if a large percentage of the total income of a community is in the hands of those with a low propensity for consumption, much of the community's income will be lost from the local economy. On the other hand, if a large percentage of a community's income is in the hands of those with low or average incomes–those with high propensities to consume–the vast majority will be returned to the local economy. One readily notes the desirability of having a reasonably equal distribution of wealth in order to create a sound and healthy economic environment in which to work and live.

As shown by Chart 4, the gap between mean and median income in Lauderdale County is almost the same as that of Alabama and the United States; however, much larger than is the case with Colbert County, therefore; indicating a distribution of income almost identical to that of Alabama and the United States, but much poorer than that of Colbert County. However, due to the many economic interrelationships between Colbert and Lauderdale County, and the commuting patterns of workers in both counties, the combined unit comprising the Muscle Shoals Area reflects a reasonably good picture of income distribution.

On the basis of the above findings, it appears that Colbert County has a better defined middle class than does Lauderdale County. Since the middle class is the backbone of the community, it would seem wise for Lauderdale County to strive toward increasing the size of this group.

Education

Today, as never before, the value and necessity of education is making itself manifest. In our modern day society there is a technological revolution occurring which is completely reshaping the composition of the entire labor force; and rendering the uneducated and unskilled obsolete. No longer is education merely a luxury, but a dire necessity; and if society is to keep pace and meet the new demands which will surely be made upon it, it must provide the necessary education and training.

To the Muscle Shoals Area this means, simply, that the higher the educational attainments of its citizenry, the more productive will be its labor force; and, as a result, the better its chances for attracting new industry, which, in turn, will result in greater community growth and prosperity.

Table 20 measures and compares the educational attainments of adults 25 years and older in Colbert County, Lauderdale County, urban Alabama and urban United States. It is shown that median school years completed in Lauderdale County is only 9.5 years; 3/10 of a year less than Colbert County with a 9.8 year median; 8/10 less than urban Alabama with a 10.3 year median and 1.6 years less than the median for urban United States of 11.1 years.

Another meaningful measure of educational attainment is to note that in Lauderdale County only 32.7 percent of the adults have completed high school, and 6.4 percent have completed college. In comparison, 33.5 percent of the adults in Colbert County completed high school, and only 5.1 percent completed college. Both counties compare unfavorably with urban Alabama's ratio of 38.5 percent high school graduates and 7.9 percent college graduates, and compare poorly with the urban United States ratio 44.2 percent high school graduates and 8.9 percent college graduates. Finally, note that 44.8 percent of Lauderdale's adult population has only 1 to 8 years of school and 1.7 percent have none, while, 41.4 percent of Colbert's adult population has only 1 to 8 years of education and 2.4 percent have none.

Table 21 and Chart 5 show that educational attainments of non-white adults in both Colbert and Lauderdale Counties are, in all respects, well below that of white adults. For non-white adults in Colbert County only 15.9 percent completed high school, as compared to 37.1 percent for the white population. Of Lauderdale County's non-white adults, only 11.4 percent completed high school, as compared to 35.3 percent for the white segment. Non-white college graduates in Colbert County comprise only 2.9 percent of the non-white population while their white counterparts comprise 5.6 percent. Lauderdale's difference is somewhat larger, presumably due to the effect of Florence State University, with 6.9 percent of the white population in the college graduate category, while only 1.9 percent of the non-white population have earned college degrees.

TABLE 20

EDUCATIONAL ATTAINMENT OF PERSONS 25 YEARS AND OLDER, 1960

	SELECTED AREAS			
	Urban U.S.	Urban Alabama	Colbert County	Lauderdale County
% no school years completed	*2.2*	*2.8*	*2.4*	*1.7*
% one to eight years	*33.8*	*37.9*	*41.4*	*44.8*
% one to three years high school	*19.8*	*20.8*	*22.7*	*20.7*
% four years high school or better	*44.2*	*38.5*	*33.5*	*32.7*
% one to three years college	*9.6*	*8.1*	*6.6*	*7.1*
% four years college or better	*8.9*	*7.9*	*5.1*	*6.4*
Median school years completed	*11.1*	*10.3*	*9.8*	*9.5*

Source: U.S. Census of Population.

TABLE 21

EDUCATIONAL ATTAINMENT OF PERSONS 25 YEARS AND OLDER, BY RACE 1960

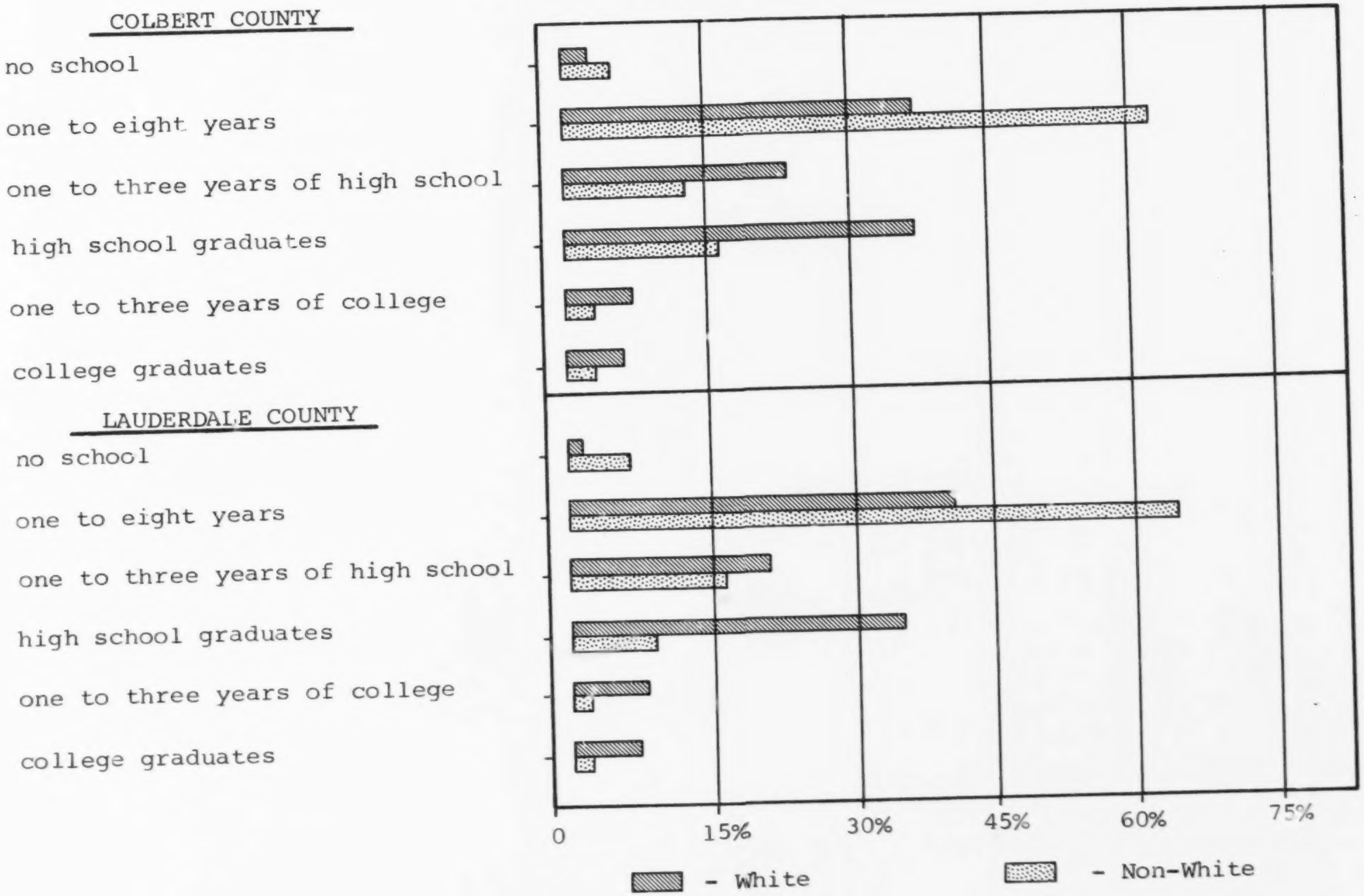
	COLBERT COUNTY		LAUDERDALE COUNTY	
	White	Non-White	White	Non-White
% no school years completed	*1.9*	*4.7*	*1.2*	*6.4*
% one to eight years	*37.0*	*62.8*	*42.2*	*65.6*
% one to three years high school	*23.9*	*16.6*	*21.2*	*16.7*
% four years high school or better	*37.1*	*15.9*	*35.3*	*11.4*
% one to three years college	*7.4*	*2.7*	*7.7*	*1.9*
% four years college or better	*5.6*	*2.9*	*6.9*	*1.9*
Median school years completed	*INA*	*7.2*	*INA*	*6.6*

INA: Information not available.

Source: U.S. Census of Population, 1960.

CHART 5

PERCENT OF SCHOOL GRADES COMPLETED, BY RACE,
COLBERT AND LAUDERDALE COUNTIES
1960



Source: Table 21

Approximately two-thirds of the non-whites in both counties have 1 to 8 years of school, while 4.7 percent in Colbert and 6.4 percent in Lauderdale have no formal education at all.

In explanation of the relatively low educational attainments of Muscle Shoals Area adults, it appears that a combination of large pre-graduation drop-outs, plus considerable out-migration constitute the primary factors responsible for this trend. It can be recalled from the section on migration that the largest out-migration occurred in the young productive age groups. It would seem reasonable to assume that most of these people left in search of economic opportunity, and since the better educated are the ones most likely to find employment, it would appear that many of the better educated citizens of both counties were in the group which constituted the exodus. Consequently, the educational levels of both counties are appreciably lower than they would have been had these persons remained.

Housing Conditions

The housing conditions in the two counties vary to some extent. However, housing conditions in both Colbert and Lauderdale Counties are much better than the overall average conditions for the State. According to the 1960 Housing Census, the following conditions were present:

	Alabama	Colbert	Lauderdale
Sound[a]	*66.1%*	*73.3%*	*72.8%*
Deteriorating[b]	*21.8%*	*16.1%*	*19.5%*
Dilapidated[c]	*12.1%*	*10.6%*	*7.7%*

[a] *Sound housing is defined as that which has no defects, or only slight defects which normally are corrected during the course of regular maintenance.*

[b] *Deteriorating housing needs more repair than would be provided in the course of regular maintenance.*

[c] *Dilapidated housing does not provide safe and adequate shelter and in its present condition endangers the health, safety, or well being of the occupants.*

The median dollar value of all housing in the two-county area is above the State median: for the State the median value is $5,000, $9,500 in Colbert, and $9,800 in Lauderdale County.

The cost of renting housing facilities is higher in the area than the State. The median rent is $31 for the State, $49 for Colbert County, and $45 for Lauderdale.

More detail information on the 1960 conditions of housing in both counties is given in Tables 22 through 24.

A separate component of comprehensive planning for the Muscle Shoals Area is devoted to neighborhood analysis which includes a current review of housing conditions. Therefore, little time is devoted in this section to analysis of housing relationships based on the 1960 Census of Housing.

TABLE 22

TENURE, VACANCY STATUS, CONDITION AND PLUMBING FACILITIES, AND STRUCTURAL CHARACTERISTICS, FOR COLBERT AND LAUDERDALE COUNTIES

	Colbert	Lauderdale
All housing units	*13,952*	*18,736*
Tenure, Color, and Vacancy Status		
Occupied	*12,763*	*17,155*
Owner occupied	*8,271*	*11,621*
White	*7,198*	*10,664*
Non-White	*1,073*	*957*
Renter occupied	*4,492*	*5,534*
White	*3,434*	*4,638*
Vacant	*1,189*	*1,581*
Year Round	*762*	*1,314*
Sound or deteriorating	*656*	*1,132*
Available	*493*	*716*
For sale only	*127*	*273*
For rent	*366*	*443*
Dilapidated	*106*	*182*
Seasonal	*426*	*267*
Condition and Plumbing		
All units	*13,952*	*18,736*
Sound	*10,230*	*13,647*
With all plumbing facilities	*8,809*	*11,364*
Lacking only hot water	*122*	*94*
Lacking other plumbing facilities	*1,299*	*2,189*
Deteriorating	*2,249*	*3,639*
With all plumbing facilities	*835*	*1,082*
Lacking only hot water	*99*	*60*
Lacking other plumbing facilities	*1,313*	*2,497*
Dilapidated	*1,475*	*1,450*
Water Supply		
Hot & cold piped water inside structure	*10,215*	*13,816*
Only cold piped water inside structure	*1,082*	*1,235*
Piped water outside structure	*757*	*582*
No piped water	*1,898*	*3,103*
Toilet Facilities		
Flush toilet, exclusive use	*10,287*	*13,191*
Flush toilet, shared	*163*	*333*
Other toilet facilities or none	*3,502*	*5,212*
Bathing Facilities		
Bathtub or shower, exclusive use	*10,076*	*12,882*
Bathtub or shower, shared	*121*	*289*
No bathtub or shower	*3,755*	*5,565*
Year Structure Built		
1959 to March, 1960	*1,010*	*1,125*
1955 to 1958	*1,754*	*2,690*
1950 to 1954	*2,028*	*2,616*
1940 to 1949	*3,249*	*4,339*
1930 to 1939	*1,710*	*2,266*
1929 or earlier	*4,201*	*5,700*

Source: U.S. Bureau of the Census, 1960 Census of Housing.

TABLE 23

FINANCIAL CHARACTERISTICS OF HOUSING IN COLBERT AND LAUDERDALE COUNTIES

Value	Colbert	Lauderdale
Owner occupied	*6,716*	*8,478*
Less than $5,000	*1,215*	*1,745*
$5,000 to $7,400	*1,153*	*1,327*
$7,500 to $9,900	*1,208*	*1,260*
$10,000 to $12,400	*1,109*	*1,124*
$12,500 to $14,900	*844*	*1,054*
$15,000 to $17,400	*555*	*669*
$17,500 to $19,900	*248*	*488*
$20,000 to $24,900	*202*	*423*
$25,000 to $34,900	*147*	*256*
$35,000 or more	*35*	*132*
Median (dollars)	*9,500*	*9,800*
Vacant–available for sale	*116*	*268*
Median price asked	–	*14,000*
Renter occupied	*4,174*	*4,944*
Less than $20	*281*	*408*
$20 to $29	*479*	*720*
$30 to $39	*499*	*646*
$40 to $49	*448*	*639*
$50 to $59	*354*	*545*
$60 to $69	*427*	*346*
$70 to $79	*302*	*313*
$80 to $99	*354*	*300*
$100 to $119	*110*	*128*
No Cash Rent	*869*	*786*
Median (dollars)	*49*	*45*
Contract Rent		
Renter occupied	*3,305*	*4,158*
Median (dollars)	*34*	*33*
Vacant–available for rent	*355*	*390*
Median rent asked (dollars)	*36*	*41*

Source: U.S. Bureau of the Census, 1960 Census of Housing.

Note: Totals of housing units in Table 23 do not agree with totals in other tables because units in multiunit structures and trailors and, in rural territory, units on farms and all units on places of 10 acres or more (whether farm or non-farm), were excluded from the tabulation. The values of such units are not provided because of heterogeniety in the use and size of the property.

TABLE 24

SELECTED CHARACTERISTICS OF HOUSING UNITS
1960

	Alabama	Colbert	Lauderdale
All housing units	*967,466*	*13,952*	*18,736*
Number occupied	*884,116*	*12,763*	*17,155*
Percent owner occupied	*59.7*	*64.8*	*67.7*
Median number of persons	*3.2*	*3.4*	*3.2*
Occupied housing units			
Owner occupied			
Number	*528,031*	*8,271*	*11,621*
Median value in dollars	*8,600*	*9,500*	*9,800*
Median number of rooms	*5.3*	*5.4*	*5.3*
Median number of persons	*3.2*	*3.3*	*3.3*
Renter occupied			
Number	*356,085*	*4,492*	*5,534*
Median gross rent in dollars	*45*	*49*	*45*
Median number of rooms	*3.9*	*4.1*	*4.0*
Median number of persons	*3.3*	*3.5*	*3.2*

Source: U.S. Bureau of the Census, 1960 Census of Housing.

THE ECONOMIC BASE

The Economic Base Study identifies and analyzes current sources of employment and income, and determines which serve markets outside the metropolitan area and which serve markets within the metropolitan area. The purpose is to assist the community in question by providing detailed economic information about the local economy and its economic base in order to contribute to the quality of both public and private decisions concerned with local economic problems; and thereby enlarge economic opportunity for the citizens residing therein, resulting in the improvement of their individual welfare, and the welfare of the community as a whole.

WHAT IS A LOCAL ECONOMY?

It is the way people of a locality make a living; it is the production of goods for local and outside markets; it is the distribution of goods and services for local and outside consumers; it is the measure of income produced and spent; and it is the overall process of production, consumption and possession.

In the past, one could speak of a firm or an area as an independent economic unit, but today firms and areas must be understood as integrated parts of the National economy. The economy of the Muscle Shoals Area, then, is a particular mixture of elements which can be analyzed and their consequences for the area considered within the National setting. In this report no in-depth evaluations need be made of any particular firm, for it is the trend of the whole National industry of which the firm is a part which is under investigation. Whether the market for the overall industry is expanding, declining or stable, a competent firm will respond appropriately to the demand and reflect the pattern of growth in production and employment common to all similarly situated firms. Therefore, the basis for evaluation of local types of industry is the overall trend of the National industry. As mentioned in a previous section, information on the population and labor force of the Muscle Shoals Area over a lengthy period of time is available through publications of the U. S. Department of Commerce's Bureau of the Census. However, this information is available only decennially. Therefore, the latest available Census of Population information at the writing of this report reflects the year 1960, eight years ago, and is of questionable validity in making current judgements. The U. S. Department of Labor's Bureau of Employment Security also collects and publishes labor force information and has available an annual series beginning with the year 1958 for the Muscle Shoals Labor Market Area. However, two principal procedural differences prevent this information from being comparable to the census data: (1) Census data are collected by place of residence, while Bureau of Employment Security data are collected by place of employment. (2) Although the Standard Industrial Classification procedure is used by both agencies, all government workers except public administration are classified *according to their private industrial counterpart by the Census Bureau, while the Bureau of Employment Security classifies them according to the appropriate level of government, i.e., Federal, State or Local. Keeping these basic criteria differences in mind, we can use the recently compiled Employment Security Data to make more accurate observations concerning the people who work in the Muscle Shoals Labor Market Area which is defined as all of Colbert and Lauderdale Counties.*

The Economic Base Section of this analysis attempts to: (1) identify the basic industries of the Muscle Shoals Area, (2) determine the diversity and specialization of the industrial base, (3) point out local industries with the best growth potential, (4) determine the stability of the local economy, and (5) analyze trends in related economic indicators.

BASIC AND NON-BASIC APPROACH

Basically, the Economic Base Study divides the economic activities of a community into two broad groups or sectors; local and export. The activities of the export sector are known as basic industries and are those firms and individuals serving markets outside the local area of study, and consequently bring new money into the area. On the other hand, the activities of the import sector are known as non-basic or service industries and are those firms or individuals serving markets within the local area of study, and serve only to circulate existing income. They do not export and are completely dependent upon basic industry for their existence.

It is very important to determine what is "basic" and what is "non-basic" activity because basic industries, as generators of new income from the outside, must be identified before an evaluation can be made of their functions and the resulting ramifications. For this purpose, several techniques have been developed from the basic concept of Urban Economic Analysis. The technique used in this analysis is only one of many and was chosen because of the availability of current local employment estimates by industry compiled by the U. S. Bureau of Employment Security. While this imposes limitations upon the measurement of the economic base, it does provide comparative data in the general form necessary for the application of the following formula. The results thus obtained are by no means completely accurate, however, they do give a reasonably accurate idea as to the actual number of basic and non-basic workers in the Muscle Shoals Area.

$$\text{Number of local ``BASIC'' workers} = [ie - te\,(\frac{IE}{TE})]^{*}$$

where:

ie = *Local industry employment*
te = *Local total wage and salary employment*
IE = *National industry employment*
TE = *National total wage and salary employment*

**Total wage and salary employment was used in this technique due to difficulty at local, State and National levels in measuring the four other components of total employment—agricultural, self-employed, unpaid family and private household domestic workers.*

This formula measures the importance of each industry within a community relative to the importance of the industry to the Nation, and also assigns to each local industry a weight in proportion to its size in the community. As has been stated, this approach is not perfect and does have certain limitations. In the first place, it is based on the assumption that the National employment pattern is an ideal norm by which to compare the local employment distribution. While this fails to take into consideration the advantages of local specialization, the National pattern is as "ideal" as may be obtained. Another shortcoming is the problem of "product mix". For example, if a community processes an output of food just sufficient to meet its own demands, the aforementioned formula would indicate this industry to be non-basic and would therefore indicate no export of foods. In reality, this most likely would not be the case. Probably, a large amount of the locally processed food would be exported, and other kinds or brands imported. Still another weakness is that if an industry is found to be completely non-basic, it indicates that the community in question consumes all that the industry produces. This is not always true. If one keeps in mind that this approach is based upon the assumption that there exists a uniformity of demand, consumption, and productivity throughout the Nation, it can be seen that the variations in income levels, tastes, productivity, and consumption patterns, which certainly do exist from one geographic area to another, prevent that which is logically indicated from always being necessarily true.

Nevertheless, in spite of the shortcomings and limitations of this approach, it does, as a rule, yield a reasonably accurate measurement of the basicness of the industries of a particular locale, and will consequently provide a picture of the Muscle Shoals Area's economic base which is sufficient for our needs.

BASIC AND NON-BASIC EMPLOYMENT

The economic base analysis takes into consideration that industries sometimes sell their products in both the export and local markets. For example, several manufacturers of durable goods in the Muscle Shoals Area may sell to both the local markets and those outside the area of study. Thus, employment at these establishments is partly basic and partly non-basic. It therefore follows that employment in each industry in the community is either basic, non-basic or divided between the two.

Tables 25 and 26 show the number of basic and non-basic workers in the Muscle Shoals Area in 1958 and 1968 as computed by the formula discussed above. One readily notes the dominance of the Manufacturing segment and especially the Primary Metals Industry as the major basic industry. In 1958 Primary Metals constituted 40.8 percent of all basic employment in the area. In 1968 the proportion of Primary Metals workers had increased to 62.9 percent of the total. When considering that all non-basic employment is dependent upon basic employment, the inherent danger of a situation such as this, when a large portion of basic employment is concentrated in one industry, can readily be seen. A further discussion of these dangers and the resulting ramifications will follow in a later portion of this study entitled Stability of the Economic Base.

TABLE 25

BASIC AND NON-BASIC EMPLOYMENT
MUSCLE SHOALS AREA
MARCH 1958

Industry	Muscle Shoals Area Wage & Salary Employment	Basic Employment	%	Non-Basic Employment	%
Total Manufacturing	*8,640*	*4,820*	*57.1*	*3,820*	*22.7*
Food & Kindred Products	*480*	*0*	*0.0*	*480*	*2.9*
Textile & Apparel Products	*440*	*0*	*0.0*	*440*	*2.6*
Lumber & Wood Products	*210*	*0*	*0.0*	*210*	*1.2*
Paper & Printing Industries	*110*	*0*	*0.0*	*110*	*0.7*
Chemical & Allied Products	*220*	*0*	*0.0*	*220*	*1.3*
Rubber Products	*980*	*800*	*9.5*	*180*	*1.1*
Stone, Clay & Glass Products	*410*	*130*	*1.5*	*280*	*1.7*
Primary Metals	*4,020*	*3,440*	*40.8*	*580*	*3.4*
Fabricated Metals	*980*	*450*	*5.3*	*530*	*3.1*
Machinery	*460*	*0*	*0.0*	*460*	*2.7*
Other Manufacturing	*330*	*0*	*0.0*	*330*	*2.0*
Mining & Quarrying	*200*	*0*	*0.0*	*200*	*1.2*
Contract Construction	*2,340*	*1,130*	*13.4*	*1,210*	*7.2*
Transportation, Communications and Utilities	*1,140*	*0*	*0.0*	*1,140*	*6.8*
Wholesale & Retail Trade	*3,920*	*0*	*0.0*	*3,920*	*23.3*
Finance, Insurance & Real Estate	*600*	*0*	*0.0*	*600*	*3.6*
Service & Miscellaneous	*2,060*	*0*	*0.0*	*2,060*	*12.2*
Government	*6,380*	*2,490*	*29.5*	*3,890*	*23.1*
Total Wage & Salary Employment	*25,280*	–	–	–	–
	Total Basic Employment	*8,440*	*100.0*	–	–
			Total Non-Basic Employment	*16,840*	*100.0*

Source: U.S. Bureau of Employment Security–Calculations by Rust Engineering Company, Urban & Regional Planning Department.

TABLE 26

BASIC AND NON-BASIC EMPLOYMENT
MUSCLE SHOALS AREA
MARCH 1968

Industry	Muscle Shoals Area Wage & Salary Employment	Basic Employment	%	Non-Basic Employment	%
Total Manufacturing	*11,630*	*7,340*	*76.2*	*4,290*	*19.6*
Food & Kindred Products	*500*	*0*	*0.0*	*500*	*2.3*
Textile & Apparel Products	*720*	*0*	*0.0*	*720*	*3.3*
Lumber & Wood Products	*190*	*0*	*0.0*	*190*	*0.9*
Paper & Printing Industries	*240*	*0*	*0.0*	*240*	*1.1*
Chemical & Allied Products	*680*	*210*	*2.2*	*470*	*2.2*
Rubber Products	*1,060*	*810*	*8.4*	*250*	*1.1*
Stone, Clay & Glass Products	*540*	*260*	*2.7*	*280*	*1.3*
Primary Metals	*6,660*	*6,060*	*62.9*	*600*	*2.7*
Fabricated Metals	*610*	*0*	*0.0*	*610*	*2.8*
Machinery	*320*	*0*	*0.0*	*320*	*1.5*
Other Manufacturing	*110*	*0*	*0.0*	*110*	*0.5*
Mining & Quarrying	*70*	*0*	*0.0*	*70*	*0.3*
Contract Construction	*1,440*	*50*	*0.5*	*1,390*	*6.4*
Transportation, Communications and Utilities	*1,200*	*0*	*0.0*	*1,200*	*5.5*
Wholesale & Retail Trade	*5,190*	*0*	*0.0*	*5,190*	*23.8*
Finance, Insurance & Real Estate	*850*	*0*	*0.0*	*850*	*3.9*
Service & Miscellaneous	*3,100*	*0*	*0.0*	*3,100*	*14.2*
Government	*8,010*	*2,250*	*23.3*	*5,760*	*26.4*
Total Wage & Salary Employment	*31,490*	–	–	–	–
Total Basic Employment		*9,640*	*100.0*	–	–
Total Non-Basic Employment				*21,850*	*100.0*

Source: U.S. Bureau of Employment Security–Calculations by Rust Engineering Company, Urban & Regional Planning Department.

In addition to Primary Metals Manufacturing, several other industrial groups account for smaller proportions of basic workers. Due mainly to the concentration of Tennessee Valley Authority operations in the Muscle Shoals Area, total government employment accounts for 23.3 percent of the basic workers. Rubber; Stone, Clay and Glass and Chemicals Manufacturing and a small portion of employment in the Contract Construction industry account for the balance of the basic workers in the two-county area.

THE "MULTIPLIER" EFFECT OF BASIC EMPLOYMENT

In conjunction with the preceding concept it would be logical to say that each basic worker directly creates employment for, and as a result indirectly supports, a certain number of non-basic or service workers. To carry this a step further, it would be reasonably accurate to say that together, the basic and non-basic workers are supporting a given number of the population. However, one should keep in mind that wage and salary employment was used in the formula instead of total employment, thus, excluding self-employed, unpaid family, domestic and agricultural workers from the computation. Also, one should remember that employment statistics provided by the U.S. Bureau of Employment Security are compiled on a place of employment basis and include in-commuters while excluding out-commuters.

It is shown that in 1968 each basic worker created employment for 2.27 non-basic workers. It therefore follows that if the same relationship should hold true in the future, the addition of each new basic job would increase the total employment level in Colbert and Lauderdale Counties by more than three workers. If one notes the change which occurred from 1958 to 1968, it can be seen that this relationship does not necessarily remain constant. It does, however, provide a reasonably accurate yardstick by which to measure the change which could occur as a result of the addition of basic workers.

An interesting set of related statistics were developed in a National study released recently by the Chamber of Commerce of the United States. According to this study, the addition of 100 new manufacturing jobs to the Labor Force of an average community will result in:

359 more people,
100 more households,
91 more school children,
$710,000 more personal income per year,
$229,000 more bank deposits,
97 more passenger cars registered,
65 more workers employed in non-manufacturing,
$331,000 more retail sales per year, and
3 more retail establishments.

The study emphasizes that effects of increased manufacturing employment on any specific community will depend upon the type of factory; nature of the Labor Force; nature, size and utilization of present community facilities; and many other factors which, of course, are given consideration in the basic employment analysis approach.

INDUSTRIAL DIVERSIFICATION

The preceding section inferred that the economic base of the Muscle Shoals Area is less than perfect in industrial diversification. Further evidence of this can be had by looking at Table 27 which shows Muscle Shoals and United States employment distribution by types of industry.

In 1958, 34.2 percent of Muscle Shoals Area's total wage and salary employment was in the Manufacturing segment; very close to the National proportion of 31.4 percent. In 1968 the percentage of Manufacturing workers in the Muscle Shoals Area had increased to 36.9 percent of the total, while the National proportion had decreased to 29.2 percent. Although a major portion of factory expansion in the Muscle Shoals Area had been in industries which are also rapidly growing on a National basis, such as Chemicals, Primary Metals and Machinery, it appears that the non-factory segment is not exhibiting the growth expected in a well diversified economy.

INDEX OF SPECIALIZATION

For the purpose of analysis, an index of local specialization was employed using the United States as an ideal standard. While this is by no means a perfect standard, it is adequate for our needs. The formula with which this index was computed is merely a variation of the one used to calculate the number of basic workers. The index is interpreted as follows:

> *An index greater than 1.00 indicates that the local industry exceeds the National average; an index less than 1.00 indicates the industry to be underdeveloped relative to the industry's position in the National economy; an index of 1.00 indicates average specialization.*

TABLE 27

EMPLOYMENT DISTRIBUTION BY INDUSTRY MUSCLE SHOALS AREA AND UNITED STATES

Industry	1958 Muscle Shoals Area	%	United States (in thousands)	%	1968 Muscle Shoals Area	%	United States (in thousands)	%
Total Wage & Salary Employment	*25,280*	*100.0*	*50,350.0*	*100.0*	*31,490*	*100.0*	*66,713.0*	*100.0*
Total Manufacturing	*8,640*	*34.2*	*15,814.0*	*31.4*	*11,630*	*36.9*	*19,447.0*	*29.2*
Food & Kindred	*480*	*1.9*	*1,668.4*	*3.3*	*500*	*1.6*	*1,690.4*	*2.5*
Textile & Apparel	*440*	*1.7*	*2,076.8*	*4.1*	*720*	*2.3*	*2,393.0*	*3.6*
Lumber & Wood	*210*	*0.8*	*572.3*	*1.1*	*190*	*0.6*	*587.2*	*0.9*
Paper & Printing	*110*	*0.4*	*1,429.9*	*2.8*	*240*	*0.8*	*1,739.6*	*2.6*
Chemicals	*220*	*0.9*	*800.7*	*1.6*	*680*	*2.2*	*1,021.8*	*1.5*
Rubber Products	*980*	*3.9*	*341.4*	*0.7*	*1,060*	*3.4*	*543.4*	*0.8*
Stone, Clay & Glass	*410*	*1.6*	*544.3*	*1.1*	*540*	*1.7*	*574.6*	*0.9*
Primary Metals	*4,020*	*15.9*	*1,153.1*	*2.3*	*6,660*	*21.2*	*1,303.5*	*1.9*
Fabricated Metals	*980*	*3.9*	*1,072.6*	*2.1*	*610*	*1.9*	*1,363.3*	*2.0*
Machinery	*460*	*1.8*	*2,656.4*	*5.3*	*320*	*1.0*	*3,913.6*	*5.9*
Other Manufacturing	*330*	*1.3*	*3,498.1*	*6.9*	*110*	*0.3*	*4,891.2*	*7.3*
Mining & Quarrying	*200*	*0.8*	*754.0*	*1.5*	*70*	*0.2*	*594.0*	*0.9*
Contract Construction	*2,340*	*9.3*	*2,419.0*	*4.8*	*1,440*	*4.6*	*2,967.0*	*4.4*
T. C. & U.[1]	*1,140*	*4.5*	*3,970.0*	*7.9*	*1,200*	*3.8*	*4,276.0*	*6.4*
Trade	*3,920*	*15.5*	*10,464.0*	*20.8*	*5,190*	*16.5*	*13,658.0*	*20.5*
F. I. & R. E.[2]	*600*	*2.4*	*2,490.0*	*4.9*	*850*	*2.7*	*3,288.0*	*4.9*
Service & Miscellaneous	*2,060*	*8.1*	*6,660.0*	*13.2*	*3,100*	*9.8*	*10,290.0*	*15.4*
Government	*6,380*	*25.2*	*7,779.0*	*15.4*	*8,010*	*25.4*	*12,193.0*	*18.3*

[1] *Transportation, Communications & Utilities.*

[2] *Finance, Insurance, & Real Estate.*

Source: U.S. Department of Labor–Bureau of Employment Security.

$$\text{Index of Specialization} = \left\{ \frac{\frac{ie}{te}}{\frac{IE}{TE}} \right\}^{*}$$

where:

ie = *Local industry employment*
te = *Local total wage and salary employment*
IE = *National industry employment*
TE = *National total wage and salary employment*

SPECIALIZATION AND GROWTH POTENTIAL OF MUSCLE SHOALS INDUSTRIES

The primary purpose of Tables 28 and 29 is not so much to illustrate that the Muscle Shoals Area specializes in the manufacture of Rubber Products and Primary Metals and has a large concentration of Government workers—certainly most of us were already aware of this. Rather, the importance of this procedure lies in the fact that it points out those industries which have the most favorable growth potential as basic industries in terms of their present degree of specialization.

It will be noted as one studies the following list, that several of the industries listed are not manufacturing industries. Generally, the industrial growth potential of a community is thought to include only those industries engaged in manufacturing activity; however, this is a fallacy, and, in fact, many non-manufacturing industries are equally as basic as some of the manufacturing ones—this is to say that they export their goods and services and as a result bring "new money" into the community. Good examples of this in the Muscle Shoals Area are the Tennessee Valley Authority and Florence State University—both governmental agencies.

Relative to the United States, the Muscle Shoals Area, in 1968, (see Table 29) specialized in

—Chemicals and Allied Products - Manufacturing
—Rubber and Miscellaneous Plastic Products - Manufacturing
—Stone, Clay and Glass Products - Manufacturing
—Primary Metals - Manufacturing
—Contract Construction
--Governmental Facilities

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*Total wage and salary employment was used in this technique due to difficulty at local, State and National levels in measuring the four other components of total employment—agricultural, self-employment, unpaid family and private household domestic workers.

TABLE 28

INDEX OF SPECIALIZATION OF MUSCLE SHOALS AREA INDUSTRIES

1958

Industry	Percent of Total Wage & Salary Employment		Index
	Muscle Shoals	United States	
Total Manufacturing	*34.2*	*31.4*	*1.09*
Food & Kindred	*1.9*	*3.3*	*0.58*
Textile & Apparel	*1.7*	*4.1*	*0.41*
Lumber & Wood	*0.8*	*1.1*	*0.73*
Paper & Printing	*0.4*	*2.8*	*0.14*
Chemicals	*0.9*	*1.6*	*0.56*
Rubber Products	*3.9*	*0.7*	*5.57*
Stone, Clay & Glass	*1.6*	*1.1*	*1.45*
Primary Metals	*15.9*	*2.3*	*6.91*
Fabricated Metals	*3.9*	*2.1*	*1.86*
Machinery	*1.8*	*5.3*	*0.34*
Other Manufacturing	*1.3*	*6.9*	*0.19*
Mining & Quarrying	*0.8*	*1.5*	*0.53*
Contract Construction	*9.3*	*4.8*	*1.94*
Transportation, Communications & Utilities	*4.5*	*7.9*	*0.57*
Trade	*15.5*	*20.8*	*0.75*
Finance, Insurance & Real Estate	*2.4*	*4.9*	*0.49*
Service & Miscellaneous	*8.1*	*13.2*	*0.61*
Government	*25.2*	*15.4*	*1.64*

Source: U.S. Bureau of Employment Security–Calculations by Rust Engineering Company, Urban and Regional Planning Department.

TABLE 29

INDEX OF SPECIALIZATION OF MUSCLE SHOALS AREA INDUSTRIES

1968

Industry	Percent of Total Wage & Salary Employment		Index
	Muscle Shoals	United States	
Total Manufacturing	36.7	29.2	1.26
Food & Kindred	1.6	2.5	0.64
Textile & Apparel	2.3	3.6	0.64
Lumber & Wood	0.6	0.9	0.67
Paper & Printing	0.8	2.6	0.31
Chemicals	2.2	1.5	1.47
Rubber Products	3.4	0.8	4.25
Stone, Clay & Glass	1.7	0.9	1.89
Primary Metals	21.2	1.9	11 58
Fabricated Metals	1.9	2.0	0.95
Machinery	1.0	5.9	0.17
Other Manufacturing	0.3	7.3	0.04
Mining & Quarrying	0.2	0.9	0.22
Contract Construction	4.6	4.4	1.05
Transportation, Communications & Utilities	3.8	6.4	0.59
Trade	16.5	20.5	0.80
Finance, Insurance & Real Estate	2.7	4.9	0.55
Service & Miscellaneous	9.8	15.4	0.64
Government	25.4	18.3	1.39

Source: U.S. Bureau of Employment Security–Calculations by Rust Engineering Company, Urban and Regional Planning Department.

The following Muscle Shoals Area Industries are approaching specialization in relation to the United States

- *—Food and Kindred Products - Manufacturing*
- *—Textile Mill and Apparel Products - Manufacturing*
- *—Lumber and Wood Products - Manufacturing*
- *—Fabricated Metal Products - Manufacturing*
- *—Transportation, Communications and Utilities*
- *—Wholesale and Retail Trade*
- *—Business and Personal Services*

On the basis of the indexes of specialization, it can be seen that although the Muscle Shoals Area does not have an ideally distributed economic base, there are numerous industries which have growth potential in terms of their present degree of specialization. Those industries, in Table 29, which are either slightly specialized or those which are approaching specialization relative to the United States appear to be the best prospects for future growth.

In closing, it should be stated that these are not definite recommendations, but an attempt to provide the Muscle Shoals Area with an idea of the general types of industries which, solely on the basis of their present degree of specialization, it should endeavor to attract as basic industries in order to improve the diversification of the local economy. Indeed, many have definite disadvantages which should be weighed carefully along with their advantages, and related to the overall needs of the economic community. Along this line, there are two basic questions which should always be asked when considering a particular industry, they are: (1) how sensitive is it to the fluctuations of the National business cycle, and (2) is the industry one of high growth in itself?

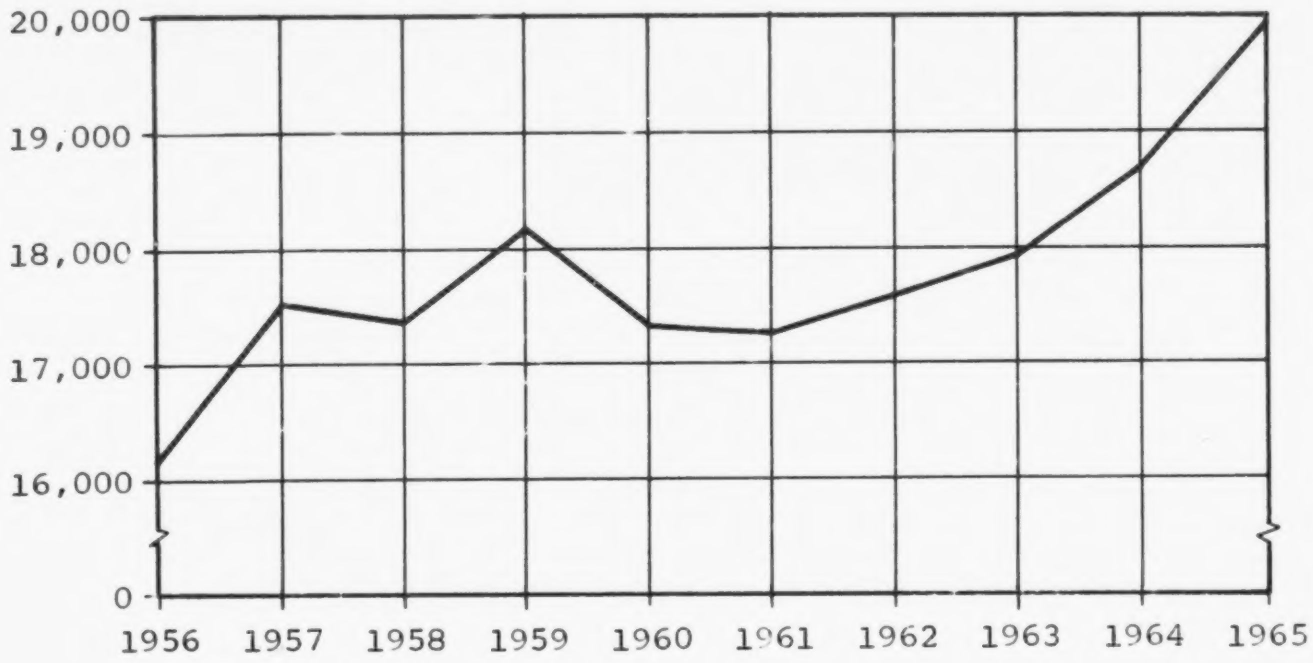
STABILITY OF THE ECONOMIC BASE

An important consideration for any community is to determine how stable is the economic base upon which the community is dependent. One method used to make this determination is to observe trends in employment and wages in the area economy. Charts 6 and 7 reflect employment and wages, respectively, for the period 1956–1965 for the combined two-county area.

One will note, in reviewing the employment trend in Chart 6, pronounced dips which occurred in 1958 and then again in 1960–61. These dips followed very closely the National trend in employment which reacted to these two recessionary periods, thus pointing up the sensitivity of Muscle Shoals Area industry to the National business cycle. Chart 7 illustrates the fact that although employment was somewhat erratic over the ten year period, average wages per worker increased at a steady rate in each year except for a very slight dip in 1960.

CHART 6

ANNUAL AVERAGE COVERED* EMPLOYMENT
MUSCLE SHOALS AREA, 1956-65

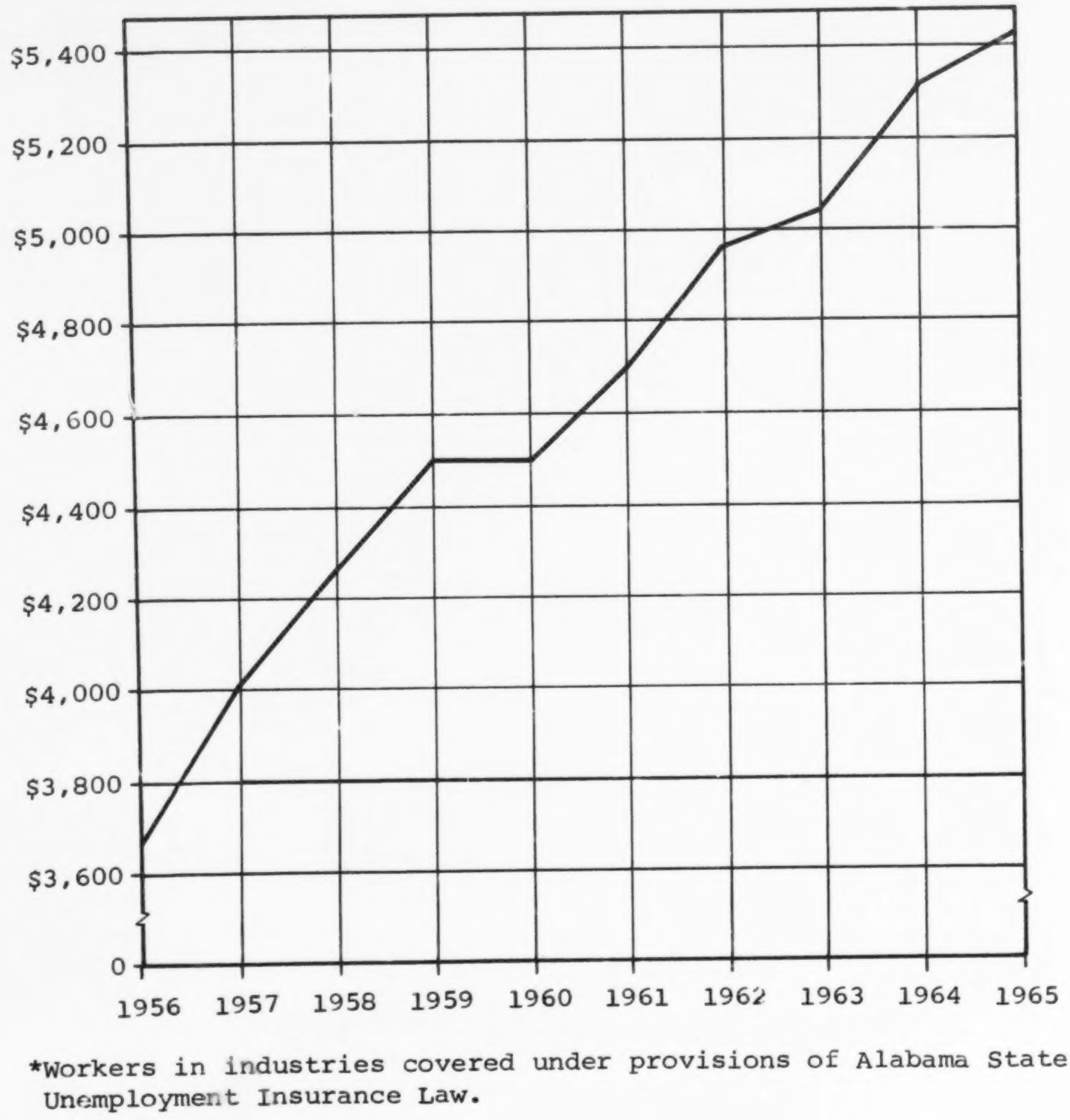


*Workers in industries covered under provisions of Alabama State Unemployment Insurance Law.

Source: Alabama Department of Industrial Relations

CHART 7

ANNUAL AVERAGE WAGES PER COVERED* WORKER
MUSCLE SHOALS AREA, 1956-65



*Workers in industries covered under provisions of Alabama State Unemployment Insurance Law.

Source: Alabama Department of Industrial Relations

The high degree of sensitivity to the National business cycle in Muscle Shoals employment further points up the need for a more diversified economic base. For example, an industry which is highly sensitive to the cyclical fluctuations of the National economy would find that the demand for its goods and services would go up and down with the slighest upward and downward movement of the business cycle. As a result, its employment, and consequently its payroll, would follow the same pattern. This, in turn, would affect the total demand for goods and services in the community which would likewise affect total employment, income, and so on. In contrast, changes in the National business cycle would have very little, if any, effect on an industry which is highly insensitive. Very little change, if any, would be noted in demand; and consequently employment, income, and so on, as a result of the ups and downs of the National business cycle.

Following is a list of industries grouped generally according to their degree of sensitivity to changes in the National business cycle:

GROUP I *(Highly Insensitive)*

Religious Organizations
Educational Services
Non-profit Membership Organizations
Legal Services
Utilities
Trucking & Warehousing
Insurance
Local Railways & Bus Lines
Misc. Repair Services
Telephone & Related Services
Medical & Health Services
Public Administration

GROUP II *(Markedly Insensitive)*

Personal Services
Real Estate
Food & Kindred Products
Printing & Publishing Industries
Business Services
Engineering Services

GROUP III *(Average Cyclical Sensitivity)*

Chemicals & Allied Products
Water Transportation
Railroads
Private Household Service
Paper & Allied Products
Amusement & Recreation
Wholesale Trade
Retail Trade
Automobile Services
Apparel & Related Products
Hotels & Motels
Radio & Television
Security Brokers, Dealers & Exchanges
Banking

GROUP IV *(Markedly Sensitive)*

Textile Mill Products
Bituminous Coal Mining
Commercial & Trade Schools
Rubber Products
Furniture & Lumber Products
Contract Construction

GROUP V *(Highly Sensitive)*

Electrical Machinery
Transportation Equipment
Primary Metal Industries
Stone, Clay & Glass Products
Machinery (non-electrical)
Fabricated Metals
Products of Petroleum & Coal
Finance

With a large percentage of Muscle Shoals employment in industries which are highly or markedly sensitive to the National business cycle, it would appear that the economic base is not as stable as could be desired. It is likely that recessions and depressions will be keenly felt in Muscle Shoals. However, it should be noted that several of the industries in which Muscle Shoals has good growth potential are relatively insensitive to the fluctuations of the business cycle and therefore, should carry a high priority in future industrial development efforts.

EMPLOYMENT TRENDS

In the preceding section on stability of the economic base, "covered" employment was intentionally used to provide a continuous series which included the last two periods of recession in the National economy. In this section we will study trends in "total" employment which is available beginning in 1958 for the Muscle Shoals Area.

Table 30 reflects change in total employment by industry between 1958 and 1968. One will note that although sizable gains were made during this ten-year period in several industrial segments, overall total employment advanced by only 3,850 jobs or 11.2 percent.

Technological developments in the farming segment plus the appeal of the urban life, discussed previously in the section on migration patterns, took its toll in reduced agricultural employment in the Muscle Shoals Area. During the ten-year period under study, a loss of 38.2 percent occurred in the agricultural segment—1,280 farming jobs ceased to exist.

The factory segment added nearly 3,000 jobs since 1958 due principally to expansion in primary metals and chemicals—both excellent growth industries. Other local manufacturing industries registered only slight increases and, in some instances, declines over the ten year period, while the same industry on the National scene was exhibiting excellent growth. It is assumed that certain endogenous variable factors, which are not within the purview of this study, influenced to some degree local growth patterns during the past ten years, however, future growth need not be tied to past experiences.

Local mining interests generally followed the National declining trend as employment reduced from 200 in 1958 to only 70 in 1968—a drop of 65 percent.

Employment in contract construction reduced by 900 jobs over the comparison period. However, it is felt that a temporary lull in building activities is indicated by this drop and not an actual declining trend.

TABLE 30

MUSCLE SHOALS EMPLOYMENT TRENDS
1958–1968

Industry	1958	1968	Net Change	Percent Change
Total Employment	*34,470*	*38,320*	*+3,850*	*+ 11.2*
Agricultural	*3,350*	*2,070*	*-1,280*	*- 38.2*
Non-Agricultural	*31,120*	*36,250*	*+5,130*	*+ 16.5*
Wage & Salary Workers	*25,280*	*31,490*	*+6,210*	*+ 24.6*
Manufacturing	*8,640*	*11,630*	*+2,990*	*+ 34.6*
Food & Kindred Products	*480*	*500*	*+ 20*	*+ 4.2*
Lumber & Wood Products	*210*	*190*	*- 20*	*- 9.5*
Paper, Printing & Publishing	*110*	*240*	*+ 130*	*+118.2*
Chemicals	*220*	*680*	*+ 460*	*+209.1*
Rubber Products	*980*	*1,060*	*+ 80*	*+ 8.2*
Stone, Clay & Glass	*410*	*540*	*+ 130*	*+ 31.7*
Primary Metals	*4,020*	*6,660*	*+2,640*	*+ 65.7*
Fabricated Metals	*980*	*610*	*- 370*	*- 37.8*
Other Manufacturing	*1,230*	*1,150*	*- 80*	*- 6.5*
Non-Manufacturing	*16,640*	*19,860*	*+3,220*	*+ 19.4*
Mining & Quarrying	*200*	*70*	*- 130*	*- 65.0*
Construction	*2,340*	*1,440*	*- 900*	*- 38.5*
T. C. & U.[1]	*1,140*	*1,200*	*+ 60*	*+ 5.3*
Wholesale & Retail Trade	*3,920*	*5,190*	*+1,270*	*+ 32.4*
F. I. & R. E.[2]	*600*	*850*	*+ 250*	*+ 41.7*
Service & Miscellaneous	*2,060*	*3,100*	*+1,040*	*+ 50.5*
Government	*6,380*	*8,010*	*+1,630*	*+ 25.5*
All Other Non-Agricultural[3]	*5,840*	*4,760*	*-1,080*	*- 18.5*

[1] *Transportation, Communications & Utilities.*

[2] *Finance, Insurance & Real Estate.*

[3] *Includes Self-Employed, Unpaid Family & Domestic Service Workers.*

Source: Alabama Department of Industrial Relations.

The transportation, communications and utilities group increased by only 60 workers since 1958. Declining employment in the railroad industry was partially responsible for the slow growth rate, but several other components with growth potential failed to expand to meet the needs of the community. Some of these industrial components which offer excellent growth potential in terms of degree of local specialization are: local and suburban transit, motor freight transportation, warehousing and water transportation.

During the past ten years, wholesale and retail trade establishments in the Muscle Shoals Area added 1,270 workers to their payrolls. This industrial growth kept reasonable pace with community growth but did not reach the potential for the trade segment. Due to a strategic location, the Muscle Shoals district could easily become a regional trade center of major proportions serving portions of three states.

The finance, insurance and real estate segment added 250 workers since 1958; an advance of 41.7 percent. However, according to its degree of specialization relative to the National distribution, growth potential exists to properly meet the needs of the community.

Although an increase of 50.5 percent occurred during the ten-year period under study in service employment, this industry offers tremendous potential for additional expansion. As the society becomes more affluent, more business and personal services are required by it. If these services are not available in the local economy, they will be secured elsewhere, resulting in a loss of money to the local economy.

Government employment expanded by 1,630 jobs between 1958 and 1968 as new governmental services were required by a growing population. The expansion of TVA facilities in the area and rapidly growing Florence State University contribured heavily to the employment gain.

The "all other non-agricultural" segment which includes self-employed, unpaid family workers and domestic servants, reduced by 1,080 or 18.5 percent during the past ten years. One principal factor in this decline is a tendency for traditional domestic workers to shun this type of work, due to the implication of servitude and relatively low earnings, in favor of more glamorous work in other industries.

LABOR FORCE TRENDS

The measure of unemployment used in this study is based on the following definition: "A count of persons who, during a specific week, were able, available and actively seeking gainful employment." While it is recognized that this definition clearly excludes some persons who might be considered by laymen to be unemployed, its value in analyzing historical trends is unquestionable. Statistics on unemployment published by the U. S. Departments of Labor and Commerce have historically used the above definition. The unemployment rate for an area is the percentage of unemployed persons in the total labor force. The labor force is comprised of three groups—the employed, the unemployed and any persons actively engaged in labor-management disputes. With the clarification of these fundamental economic terms, the reader is afforded a better understanding of the following discussion of labor force trends.

Examination of unemployment rates for the period 1959—1968 (Chart 8) reveals that, with the exception of 1961, rates for the Muscle Shoals Area, Alabama and the United States have shown a general downward trend. However, abrupt fluctuations were evident in the Muscle Shoals Area series in 1963 and again in 1967 reflecting temporary layoffs in local firms. Of significance to note is the fact that the Muscle Shoals rate of unemployment consistently exceeded the United States rate during the ten-year period and dropped below the rate for the State of Alabama only in the year 1962. The trend indicates some improvement in the local job market picture since the recessionary period of 1961, but still far too many unemployed persons for a healthy economy.

Although current estimates of labor force statistics, compiled by the U.S. Department of Labor, are developed on a "total" basis and do not reflect characteristics of age, sex or race for individual counties, some indication of these distributions can be obtained by reviewing the distribution of the labor force in the 1960 Census of Population.

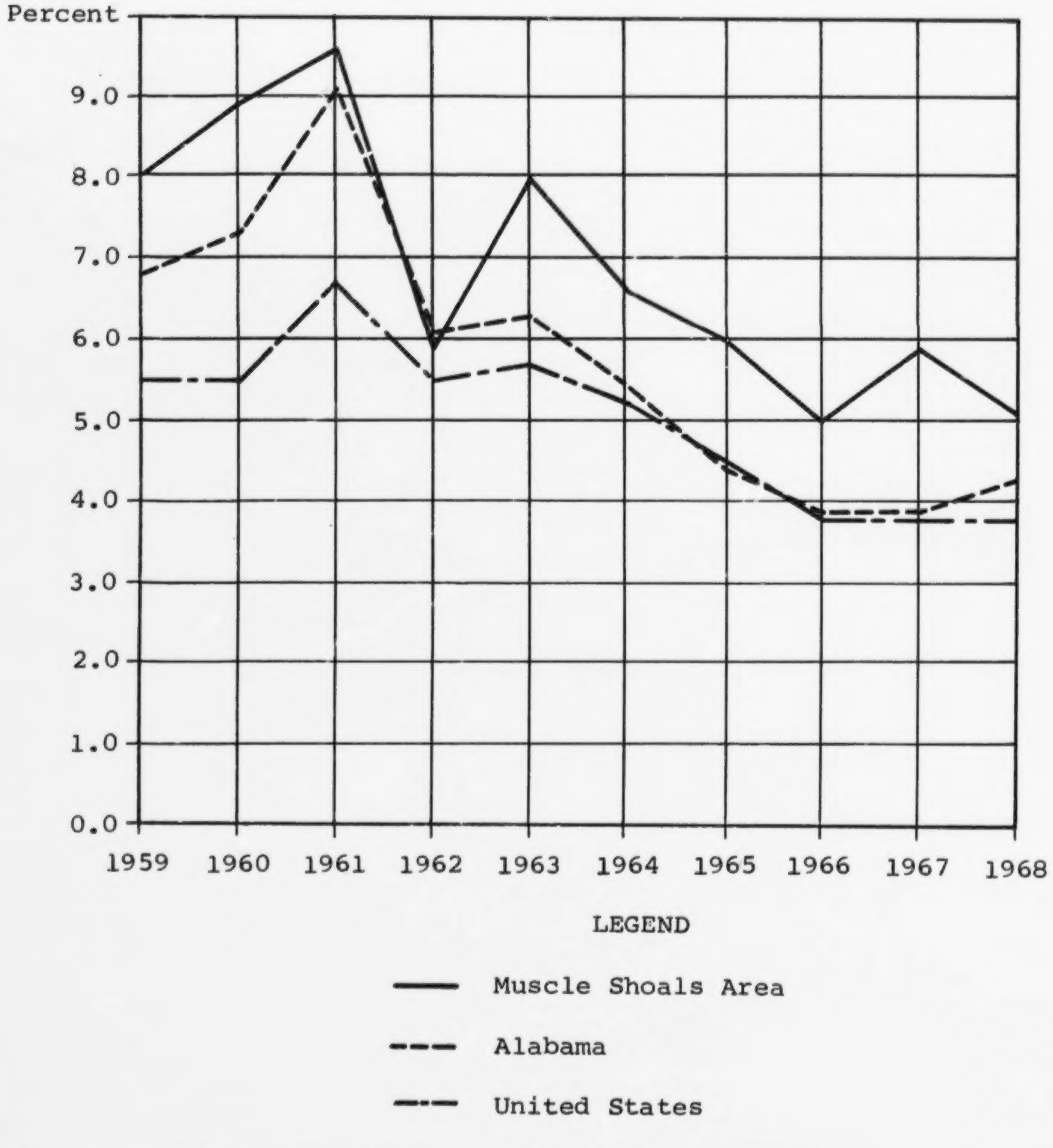
Table 31 reflects the resident labor force distributions of Colbert and Lauderdale Counties in 1960 with break-outs of the non-white population. One readily notes non-white unemployment rates for both males and females far out of proportion for their share of the population in both counties.

The distribution of the resident labor force by age and sex, presented in Table 32, appears to be reasonably well distributed in both counties. However, it should be remembered from the discussion on population characteristics that since 1960 the effects of the so called "baby-boom" have seriously altered the age distribution of the National labor force, and currently a much larger proportion is concentrated in the younger age groups.

Before passing, another important segment should be considered which is not measured with current analytical tools used by the concerned governmental agencies. This segment might be termed "hidden unemployment". This term is used because any community, and the Muscle Shoals Area is no exception, contains a group of persons who have given

CHART 8

UNEMPLOYMENT TRENDS
1959-1968*



*Data for 1968 are preliminary and subject to revision.

Source: Alabama Department of Industrial Relations

TABLE 31

CHARACTERISTICS OF THE RESIDENT LABOR FORCE, BY SEX AND RACE, 1960

Item	COLBERT COUNTY		LAUDERDALE COUNTY	
	Total	Non-White	Total	Non-White
Male (age 14 & over) – Population	*15,096*	*2,575*	*20,307*	*2,040*
Labor Force	*11,408*	*1,712*	*15,038*	*1,420*
Employed	*10,739*	*1,558*	*14,125*	*1,291*
Unemployed	*669*	*154*	*913*	*129*
Rate of Unemployment	*5.9%*	*9.0%*	*6.1%*	*9.1%*
Female (age 14 & over) – Population	*16,341*	*3,106*	*21,870*	*2,580*
Labor Force	*4,015*	*1,036*	*5,901*	*1,128*
Employed	*3,778*	*955*	*5,639*	*1,062*
Unemployed	*237*	*81*	*262*	*66*
Rate of Unemployment	*5.9%*	*7.8%*	*4.4%*	*5.9%*

Source: U.S. Census of Population–1960.

TABLE 32

DISTRIBUTION OF THE RESIDENT LABOR FORCE BY AGE AND SEX, 1960

	COLBERT COUNTY		LAUDERDALE COUNTY	
	Male	Female	Male	Female
Total	*11,412*	*4,015*	*15,071*	*5,901*
Age 14–17	*309*	*123*	*422*	*138*
Age 18–24	*1,389*	*586*	*2,109*	*1,049*
Age 25–34	*2,870*	*915*	*3,436*	*1,055*
Age 35–44	*2,811*	*971*	*3,822*	*1,532*
Age 65 and over	*290*	*84*	*585*	*160*

Source: U.S. Census of Population, 1960.

up their search for work either due to educational deficiencies or laziness or any number of real or imagined reasons or excuses. These non-productive people constitute a serious drag on the economy because they must be supported by the productive segment. No data are available to reflect the seriousness of this problem because unless persons either work or are able, available and actively seeking work, they are not included as part of the labor force. Some idea of the magnitude of hidden unemployment is shown by this comment from the U.S. Department of Labor in early 1964:

> *". . . Out of every 1,000 white men 25 to 64 years old, 82 are not working, including 33 listed as unemployed and 49 not in the labor force."*

At this point some may be wondering why existing jobs go unfilled; and, as a result, may doubt the validity of the statistical data. There are primarily two reasons for this—they are: (1) Many unfilled jobs demand skilled development, and since the vast majority of this available labor does not possess the needed skills, but are trainable for production jobs demanding skilled development, they must first be trained. (2) The type of work, the wages and the working conditions are not sufficiently attractive to induce the available workers to commute to the site locations from outlying areas.

SELECTED ECONOMIC INDICATORS

Numerous indicators of various types of business activity are available to reflect trends of economic movement in the Muscle Shoals Area. Following are several of the more significant of these economic indicators with a brief description of the trend movements.

Retail Trade

Sales at retail and the number of establishments engaged in retail trade, classified by kind of business for Colbert and Lauderdale Counties, are presented in Tables 33 and 34, respectively.

Between 1956 and 1965 the number of retail establishments in Colbert County increased from 438 to 493, a gain of 12.6 percent. The dollar sales during this period increased from $31,967,000 to $73,950,000. Among the retail establishments in Colbert County in 1965, the 47 gasoline service stations ranked first in quantity of sales with $19,209,000, while automotive dealers ranked a close second with $18,676,000.

Lauderdale County experienced an increase of 24.1 percent in the number of retail establishments between 1956 and 1965, and gained in dollar sales volume from $37,442,000 in 1956 to $59,338,000 in 1965. Among Lauderdale County's retail establishments in 1965, the 49 automotive dealers ranked first in quantity of sales with $13,132,000, and food stores ranked second with $12,337,000.

TABLE 33

RETAIL SALES IN COLBERT COUNTY, 1956–1965

Kind of Business	Number of Firms 1956	1960	1965	Sales ($1,000) 1956	1960	1961	1962	1963	1964	1965
Retail Concerns–Total	*438*	*438*	*493*	*31,967*	*39,324*	*42,385*	*48,816*	*52,317*	*58,623*	*73,950*
Food	*128*	*121*	*120*	*9,030*	*12,195*	*12,748*	*13,298*	*12,500*	*12,835*	*13,504*
General stores with food & gas	*35*	*43*	*47*	*1,059*	*1,788*	*2,278*	*2,418*	*2,606*	*2,594*	*2,632*
General merchandise	*25*	*24*	*32*	*1,444*	*2,197*	*2,505*	*2,372*	*2,184*	*2,343*	*2,616*
Apparel	*18*	*16*	*22*	*1,436*	*1,461*	*1,590*	*1,654*	*1,615*	*1,790*	*2,157*
Furniture, furnishings & appliances	*20*	*21*	*22*	*1,256*	*1,624*	*1,543*	*1,703*	*1,614*	*1,597*	*1,907*
Automotive	*29*	*35*	*43*	*8,192*	*8,688*	*9,208*	*11,957*	*12,816*	*14,359*	*18,676*
Gasoline service stations	*38*	*36*	*47*	*1,975*	*2,374*	*2,522*	*4,744*	*8,526*	*11,028*	*19,209*
Lumber and building materials	*15*	*20*	*19*	*2,033*	*2,865*	*2,804*	*2,787*	*2,203*	*2,608*	*3,144*
Hardware and farm implements	*11*	*12*	*13*	*936*	*1,012*	*1,320*	*1,593*	*1,754*	*1,991*	*2,651*
Eating places	*63*	*48*	*50*	*1,903*	*1,490*	*1,767*	*1,802*	*1,598*	*1,995*	*1,728*
Drug stores	*10*	*11*	*14*	*1,016*	*1,527*	*1,678*	*1,846*	*1,807*	*1,960*	*2,120*
All other retail concerns	*46*	*51*	*64*	*1,687*	*2,004*	*2,423*	*2,644*	*3,094*	*3,523*	*3,606*
Nonretail and unclassified concerns	*139*	*168*	*170*	*7,198*	*13,174*	*12,761*	*15,634*	*14,536*	*15,556*	*15,562*
Total, all sales at retail	*577*	*606*	*663*	*39,885*	*52,498*	*55,146*	*64,450*	*66,853*	*74,179*	*89,512*

Source: Bureau of Business Research, School of Commerce, University of Alabama, computed from data supplied by the Sales Tax Division, Alabama Department of Revenue.

TABLE 34

RETAIL SALES IN LAUDERDALE COUNTY, 1956–1965

Kind of Business	Number of Firms			Sales ($1,000)						
	1956	1960	1965	1956	1960	1961	1962	1963	1964	1965
Retail Concerns–Total	493	551	612	37,442	46,142	46,219	51,913	58,985	54,818	59,338
Food	142	148	153	6,911	9,774	10,302	11,711	11,523	12,013	12,337
General stores with food & gas	28	36	35	921	1,004	1,269	1,102	999	922	890
General merchandise	63	59	54	4,509	4,837	5,208	5,724	7,026	5,990	5,993
Apparel	26	30	35	2,401	3,164	3,333	3,501	3,425	3,726	3,887
Furniture, furnishings & appliances	29	34	32	1,905	2,447	2,541	3,206	3,077	3,376	3,313
Automotive	30	31	49	8,733	9,467	8,902	11,761	17,011	11,366	13,132
Gasoline service stations	42	49	62	2,146	2,634	2,341	2,393	2,625	2,755	3,025
Lumber and building materials	15	20	23	2,880	3,354	3,170	3,152	3,108	3,408	3,794
Hardware and farm implements	10	13	10	1,398	1,877	1,673	1,764	1,797	1,819	2,114
Eating places	42	49	55	1,193	1,536	1,559	1,619	2,001	2,554	3,257
Drug stores	11	11	16	1,518	1,729	1,689	1,672	1,759	1,717	1,820
All other retail concerns	55	71	88	2,928	4,318	4,232	4,308	4,633	5,172	5,777
Nonretail and unclassified concerns	174	180	183	7,628	13,189	13,890	15,046	16,091	17,109	18,234
Total, all sales at retail	667	731	795	45,070	59,330	60,109	66,958	75,076	71,927	77,572

Source: *Bureau of Business Research, School of Commerce, University of Alabama, computed from data supplied by the Sales Tax Division, Alabama Department of Revenue.*

Wholesale Trade

As mentioned in a previous section, the Muscle Shoals Area has definite potential for becoming a regional trade center drawing a large volume of customers from several nearby Alabama Counties plus sections of Mississippi and Tennessee. However, trade growth in the recent past has been relatively slow compared to the growth in the factory segment. In 1958 Colbert County had 52 wholesale establishments reporting annual sales of $32,551,000. In 1963 a total of 59 establishments reported that dollar sales reduced to $31,378,000. Lauderdale County's wholesale firms numbered 56 in 1958 with sales of $24,338,000. In 1963 this segment increased to 78 firms with only $33,712,000 in annual sales.

Wholesale trades, as basic industries with high growth potential, are of great importance to the economic development of the community. It would, therefore, be wise for Muscle Shoals to endeavor to attract more industry of this type.

Service Trade

Service trade establishments which include hotels, motels, personal and business services, repair services and recreation services have, in recent years, been tremendous growth industries Nationally. Although considerable room exists for improvement in the Muscle Shoals Area, significant expansion has taken place during the past few years. Table 35 shows trends in service trade in both Counties between 1958 and 1963. Colbert County experienced gains of 37 percent in the number of establishments and 32.1 percent in receipts. Lauderdale County enjoyed a much better gain as the total number of establishments increased 48.7 percent and total receipts gained 72.3 percent. In the Muscle Shoals Area in 1963, service trades accounted for an annual payroll of $3,149,000 and reported gross receipts of $12,678,000.

Agriculture

Once the largest employer and principal support of the two-county region's economy, agriculture has experienced a continuous employment decline over the past several decades. Low profit margins, increased capital requirements due to advancing mechanization, and the enticements of higher wage, non-agricultural occupations have prompted many to abandon farming. This change in agricultural economics has been accompanied by a gradual movement of the rural population to the urban centers.

The average farm size and average dollar investment per farm, shown in Table 36, have increased while the number of workers has declined. Farming has become big business, requiring efficient management techniques, mechanization, and large-scale operations. These changes have been a major factor in the maintenance of the Muscle Shoals Area's farm income levels.

TABLE 35

TRENDS IN SERVICE TRADES, COLBERT AND LAUDERDALE COUNTIES 1958–1963

	1958	1963	Percent Change
COLBERT COUNTY			
Number of establishments	*184*	*252*	*+37.0*
Annual payroll	*$ 829,000*	*$1,141,000*	*+37.6*
Total Sales	*$3,404,000*	*$4,498,000*	*+32.1*
LAUDERDALE COUNTY			
Number of establishments	*238*	*354*	*+48.7*
Annual payroll	*$1,316,000*	*$2,008,000*	*+52.6*
Total Sales	*$4,748,000*	*$8,180,000*	*+72.3*

Source: U. S. Census of Business–Selected Services, 1963

TABLE 36

FARMS, ACREAGE AND VALUE, COLBERT AND LAUDERDALE COUNTIES, 1964

	Colbert	Lauderdale
Farms (number)	*926*	*2,133*
Approximate land area (acres)	*394,240*	*440,320*
Land in Farms (acres)	*179,263*	*248,462*
Average size of farm (acres)	*193.6*	*116.5*
Value of land and buildings		
Average per farm (dollars)	*33,034*	*20,851*
Average per acre (dollars)	*168.06*	*175.80*

Source: U. S. Bureau of the Census, Census of Agriculture: 1964 (Preliminary Report)

TABLE 37

ESTIMATED GROSS FARM INCOME IN COLBERT AND LAUDERDALE COUNTIES, 1965

	Colbert County	Lauderdale County	Total Area
Cotton	*$ 4,300,000*	*$ 5,195,802*	*$ 9,495,802*
Beef	*2,275,000*	*2,023,290*	*4,298,290*
Hogs	*500,000*	*782,640*	*1,282,640*
Poultry	*190,000*	*746,750*	*936,750*
Dairying	*300,000*	*734,312*	*1,034,312*
Corn	*1,140,000*	*690,000*	*1,830,000*
Forestry	*715,000*	*461,300*	*1,176,300*
Others	–	*400,200*	*400,200*
Total	*$ 9,420,000*	*$11,034,294*	*$20,454,294*

Source: Agricultural Extension Service, Auburn University

Estimates of 1965 farm income by the Agricultural Extension Service at Auburn University, show that the two-county region produced almost $20,500,000 worth of crops and livestock, roughly 10 percent of the Area's total income. The 1965 farm income estimates for both counties are shown in Table 37.

Value Added by Manufacturing

The growth characteristics of manufacturing industries in the Muscle Shoals Area relative to the State of Alabama are reflected in Table 38 where the changes in value added to manufactured goods are traced from 1954 to 1963.

TABLE 38

VALUE ADDED GROWTH COMPARISON
($000)

	1954	1963	Percent Change
State of Alabama	*$1,319,192*	*$2,342,124*	*+ 77.5%*
Muscle Shoals Area	*$ 49,148*	*$ 129,896*	*+164.3%*
Colbert County	*$ 42,014*	*$ 113,843*	*+171.0%*
Lauderdale Couty	*$ 7,134*	*$ 16,053*	*+125.0%*

Source: U.S. Census of Manufactures, 1954 and 1963.

During this period, the value added by manufacturing more than doubled in both Colbert and Lauderdale Counties further substantiating the point made previously concerning the significant growth in the factory segment of the Muscle Shoals Area which occurred during the past fifteen years. All factories in the State of Alabama produced an increase of 77.5 percent in value added during the same period.

Disposable Income

Table 39 reflects trends in effective buying income for Colbert and Lauderdale Counties and Alabama from 1950 through 1965. Effective buying income is defined as the amount of personal income which is available for consumption and/or savings. During the fifteen-year period under study, Colbert County gained 137.9 percent, reaching a level of $1,687 per person in 1965. Lauderdale County climbed to $1,783 per person in 1965 but this gain represented an increase of only 78.8 percent over the 1950 level. The Alabama average in 1965 was $1,664 per person; a gain of 115.8 percent over the period.

TABLE 39

PER CAPITA EFFECTIVE BUYING INCOME, COLBERT AND LAUDERDALE COUNTIES AND ALABAMA FOR SELECTED YEARS

	Colbert County	Lauderdale County	State of Alabama
1950	*$ 709*	*$ 997*	*$ 771*
1955	*$1,080*	*$1,055*	*$1,023*
1960	*$1,375*	*$1,369*	*$1,379*
1965	*$1,687*	*$1,783*	*$1,664*
percent change 1950-1965	*+137.9%*	*+ 78.8%*	*+115.8%*

Source: Sales Management Magazine, "Survey of Buying Power."

Financial Activities

Recent trends in banking activities are presented in Table 40. Significant growth is reflected in all four activities studied. Bank debits include debits to demand deposit accounts of individuals, partnerships, corporations, and of the State, counties, municipalities, and other political subdivision. Demand deposits include deposits to checking accounts plus certified and cashiers' checks.

Growth in Muscle Shoals Area financial indicators, during the period under study, compared closely and in some instances exceeded comparable indicators for larger metropolitan areas in Alabama such as the Tuscaloosa, Huntsville and Gadsden areas.

TABLE 40

FINANCIAL ACTIVITIES IN MUSCLE SHOALS AREA FOR SELECTED YEARS

	Bank Debits	Demand Deposits	Savings Deposits	Savings in Savings & Loan Associations
1950	*$294,193,000*	*$19,497,000*	*$ 4,254,000*	*1/*
1955	*$483,143,000*	*$28,031,000*	*$ 5,106,000*	*$20,355,000*
1960	*$715,434,000*	*$32,414,000*	*$11,977,000*	*$36,954,000*
1965	*$939,318,000*	*$47,907,000*	*$25,538,000*	*$58,646,000*

1/ Information not available

Source: Bureau of Business Research, University of Alabama.

Worker Mobility

As discussed in previous sections of this report, the Muscle Shoals Area is a net in-commuting area. Although current data are not available depicting trends in worker commutation, some indication can be derived from a review of commuting statistics collected as part of the 1960 Census of Population. In 1960, approximately 6,800 residents of Colbert and Lauderdale Counties worked outside of their own county. However, for 5,700 of these workers, the commutation involved working across-the-river in the other county. The remaining 1,100 workers who commuted to nearby Alabama counties and in some cases into Mississippi and Tennessee for their livlihood, constituted a shortcoming in the economy of the Muscle Shoals Area. The local economy needed to produce an adequate supply of jobs so these out-commuters could be held to a minimum, thereby affording all residents a more comfortable style of living.

Although substantiating data are not available, it is believed that the significant growth in local employment opportunities since 1960 has served to reduce the out-commutation and also increase the in-commutation by a sizable margin. This is a very necessary condition for a healthy, growing economy in order to keep the highly productive, but also highly mobile young workers at home, and draw on the supply of young workers from nearby areas.

FUTURE PROSPECTS FOR THE MUSCLE SHOALS AREA

In the previous sections of this report we have analyzed historical patterns and trends of the economy and population of the Muscle Shoals Area. We have considered trends in local economic measures relative to comparable measures in larger areas and studied implications of local changes in terms of their consequence within the National economy.

In this section we will attempt to use the knowledge gained through historical analysis of the economy, and the people served by this economy, in order to provide reasonable and logical assumptions concerning future growth prospects in the Muscle Shoals Area. This section is primarily concerned with trends toward the future but makes no predictions. Rather, trends in economic and population resources are evaluated in terms of consequences of their continuation. Projections thus made are in terms both of local trends and of local consequences of National trends. Local development strategy involves enhancement of projected trends for growth and betterment of living standards, while minimizing effects of decline and decay. This report will be considered successful if consideration of its analysis aids the citizens of the Muscle Shoals Area in making an upward revision of indicated trends in the future.

THE ECONOMIC SECTOR

Projections of the economic sector of an area always present many problems and at best are mere estimates. However, projections to the year 1980 have been made of several indicators for which historical series of data were available adequate for trend extrapolation.

The dollar sales volume of all retail establishments in Colbert County is expected to increase by more than $12 million by 1970—up 14 percent, and continue the rising trend for the following decade reaching a level of approximately $150 million in the year 1980.

Lauderdale County retail establishments also are expected to produce a significant gain in dollar sales volume during the forecast period but should grow at a slower rate than Colbert County. Retail sales are projected to reach $100 million in 1970 and then climb to $142 million by 1980.

Assuming a continuation of past local employment trends, adjusted for influence of trends in the National economy, a sizable increase is expected in total employment by 1980. Table 41 reflects changes in Muscle Shoals Area employment between 1960 and 1965 with trend projections for each major industrial group for 1970 and 1980. Total employment is expected to increase by 33.2 percent by 1980, representing an addition of

TABLE 41

MUSCLE SHOALS AREA EMPLOYMENT BY MAJOR INDUSTRY GROUP 1960, 1965 WITH PROJECTIONS TO 1970 AND 1980

	1960	1965	1970	1980	Percent Change 1960-1980
Total Employment	*35,010*	*37,800*	*40,770*	*46,640*	*+33.2%*
Manufacturing	*9,910*	*10,960*	*12,350*	*16,000*	*+61.5%*
Mining & Quarring	*160*	*80*	*70*	*40*	*-75.0%*
Contract Construction	*1,380*	*1,300*	*1,650*	*2,300*	*+66.7%*
Transportation, Communications & Utilities	*1,010*	*1,200*	*1,300*	*1,500*	*+48.5%*
Trade	*4,200*	*4,640*	*5,400*	*6,600*	*+57.1%*
Finance, Insurance & Real Estate	*700*	*760*	*900*	*1,150*	*+64.3%*
Service and Miscellaneous	*2,370*	*2,680*	*3,300*	*4,250*	*+79.3%*
Government	*6,400*	*7,810*	*8,500*	*9,500*	*+48.4%*
*All Other Non-Agriculture**	*5,810*	*5,810*	*5,000*	*3,700*	*-36.3%*
Agriculture	*3,070*	*2,560*	*2,300*	*1,600*	*-47.9%*

**Includes self-employed, unpaid family workers, and domestic servants.*

Source: Alabama Department of Industrial Relations—projections by Rust Engineering Company, Urban and Regional Planning Department.

11,630 new jobs to the local economy during the twenty-year period. Significant gains in manufacturing, trade, service and government are expected to more than offset the expected 36.3 percent decline in the self-employed and domestic servant category and 47.9 percent decline in the agricultural worker segment. Moderate to large increases in employment are expected in all other industrial segments except mining and quarrying where continuation of the declining trend is expected, however, this segment involves few jobs.

One should keep in mind that these projections are not predictions; and, indeed, many variables, such as the ability and desire to attract new industries, etc. are not taken into consideration. Their importance lies in the fact that they enable the people of the Muscle Shoals Area to see where they are heading in the future if they continue as they have in the past. Projections aid the people in altering the future course if that which is expected is not that which is desired.

As employment totals rise in basic industries, complementary employment gains will occur in non-basic industries. As more jobs are created, out-commuting will reduce, the out-migration trend will be reversed and in-migration will occur, thus, producing population growth above the natural increase.

Improved local employment opportunities and higher wage potentials will increase family income and contribute to an overall higher standard of living. This will result in a community attractive to its younger citizens, a better trained and educated labor force, higher per capita incomes resulting in increased demand for goods and services, improved housing standards and a population capable of supporting, through taxation, necessary government services such as schools, recreation facilities and utilities.

In short, the potential for future economic growth in the Muscle Shoals Area is there. The problems to achieve this growth are not insurmountable. Goals and policies to achieve this growth must be set. The Comprehensive Plan for the Council of Local Governments is a basic step in this direction which serves to unite public policy of all the concerned municipalities.

THE FUTURE POPULATION

Three methods of population projection were employed in this study for each county. Chart 9 reflects each of these methods. Method I produced the highest projections of population for 1970 and 1980 and was based on extrapolation of a parabolic trend fitted to the historical series of data by the "Sum of Least Squares" procedure. Method III produced the lowest projections for 1970 and 1980 and was based on extrapolation of a linear population trend based on the 1960-1966 trend of natural increase and assuming a constant migration rate. It is believed however, that the migration rate will increase rather than remain constant due to expected increases in employment opportunities in the Muscle Shoals Area during the forecast period. Therefore, it is believed that the actual population growth trend will fall somewhere between these two procedures. Method II, based on the "Cohort-Survival" technique, provided such a trend with projections within the accepted limits and, thus, was accepted for our future assumptions.

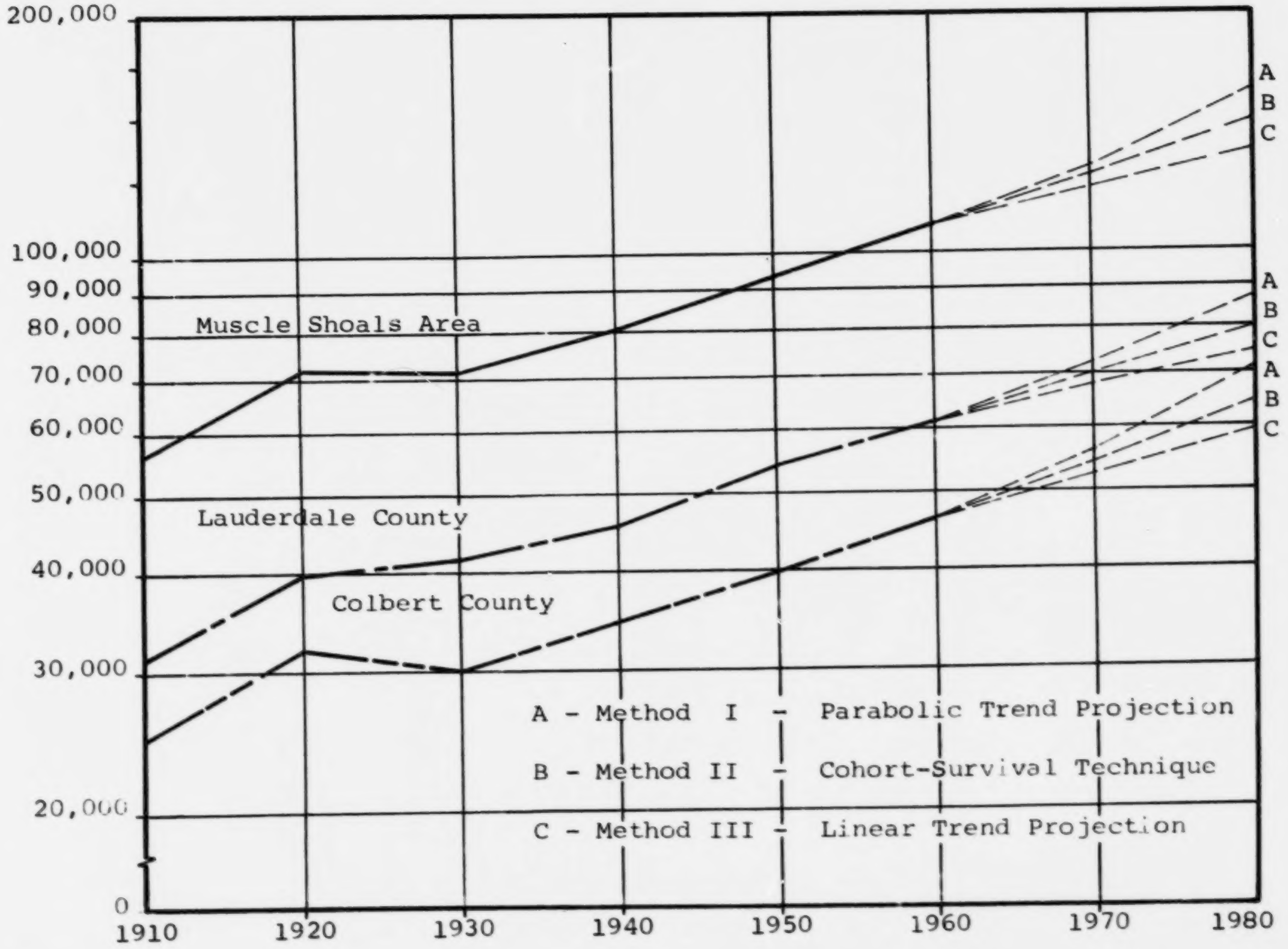
Table 42 presents the population of Colbert County projected to 1970 and 1980 by age group and sex. Total population is expected to continue increasing over the 1960 census level at a slightly increased rate. The projected total is expected to be 54,762 in 1970—up 17.8 percent from 1960, and reach 64,602 in 1980—an increase of 18.0 percent over 1970. The total population addition over the projection period is expected to be 18,096 persons representing an increase of 38.9 percent in Colbert's population since 1960. While this expected gain is quite substantial, it can be considerably higher if the Muscle Shoals Area can create the necessary new jobs to reverse the out-migration trend experienced during the previous decade and keep the young productive workers at home.

Projections of Lauderdale County's population present a slightly different trend from that of Colbert County. Total population in Lauderdale County is expected to continue climbing to 70,838 by 1970—up 15.0 percent, and reach 80,898 in 1980—up 14.2 percent over 1970. Table 43 presents these projections for Lauderdale County by age group and sex.

In order to present a more meaningful picture of the population trends currently, as well as those expected in the future, the various age groups have been combined into five distinct categories according to social and economic similarities. They are: the Pre-School Group, the School Group, the Young Productive Group, the Established Productive Group, and the Retired Group. The purpose is to enable the reader to achieve a broader understanding of the changing face of Muscle Shoals Area's population, and thereby facilitate future planning by providing a guidepost upon which to base the planning program. Before continuing, it should be pointed out that these groups are not completely accurate; however, they are useful in that they do provide a broad generalized picture of the changes occurring in the composition of the Muscle Shoals Area population.

CHART 9

POPULATION PROJECTIONS FOR COLBERT AND LAUDERDALE COUNTIES
1960-1990



Source: Base Data - U. S. Census of Population, Projections by Rust Engineering Company, Urban and Regional Planning Department

TABLE 42

POPULATION BY AGE AND SEX, COLBERT COUNTY, 1970 AND 1980

	1970		1980	
Age Group (years)	Male	Female	Male	Female
0–4	*3,153*	*2,944*	*3,642*	*3,387*
5–9	*3,020*	*2,860*	*3,485*	*3,254*
10–14	*2,966*	*2,832*	*3,391*	*3,221*
15–19	*2,378*	*2,355*	*2,732*	*2,690*
20–24	*1,791*	*2,047*	*2,041*	*2,258*
25–29	*1,550*	*1,963*	*2,009*	*2,358*
30–34	*1,496*	*1,514*	*2,135*	*2,192*
35–39	*1,416*	*1,542*	*1,727*	*2,026*
40–44	*1,603*	*1,654*	*1,633*	*1,561*
45–49	*1,496*	*1,599*	*1,381*	*1,494*
50–54	*1,390*	*1,598*	*1,507*	*1,693*
55–59	*1,336*	*1,262*	*1,444*	*1,593*
60–64	*1,016*	*1,093*	*1,224*	*1,494*
65–69	*855*	*1,093*	*1,193*	*1,527*
70–74	*562*	*701*	*848*	*996*
75 and over	*696*	*981*	*1,005*	*1,461*
Total (by sex)	*26,724*	*28,038*	*31,397*	*33,205*
Grand Total	*54,762*		*64,602*	

Source: Basic Data–U.S. Census of Population, Projections–Rust Engineering Company, Urban and Regional Planning Department.

TABLE 43

POPULATION BY AGE AND SEX, LAUDERDALE COUNTY, 1970 AND 1980

	1970		1980	
Age Group (years)	Male	Female	Male	Female
0–4	*3,984*	*3,909*	*4,443*	*4,408*
5–9	*3,880*	*3,801*	*4,325*	*4,241*
10–14	*3,637*	*3,656*	*3,971*	*4,033*
15–19	*3,429*	*3,149*	*3,853*	*3,742*
20–24	*2,598*	*2,715*	*2,870*	*3,160*
25–29	*2,148*	*2,136*	*2,752*	*2,578*
30–34	*1,767*	*1,991*	*2,398*	*2,537*
35–39	*1,836*	*1,918*	*2,202*	*2,121*
40–44	*1,940*	*2,244*	*1,769*	*2,079*
45–49	*2,043*	*2,027*	*1,848*	*1,871*
50–54	*1,871*	*1,992*	*1,887*	*2,162*
55–59	*1,523*	*1,701*	*1,848*	*1,954*
60–64	*1,286*	*1,593*	*1,651*	*1,913*
65–69	*1,005*	*1,267*	*1,337*	*1,663*
70–74	*762*	*977*	*1,140*	*1,539*
75 and over	*831*	*1,122*	*1,022*	*1,581*
Total (by sex)	*34,640*	*36,198*	*39,316*	*41,582*
Grand Total	*70,838*		*80,898*	

Source: Basic Data–U.S. Census of Population, Projections–Rust Engineering Company, Urban and Regional Planning Department.

In accordance with the above defined procedure, Tables 44 and 45 and Chart 10 illustrate current and future population compositions for Colbert and Lauderdale Counties.

The proportion of pre-school children is expected to decrease slightly in both counties during the forecast period. Colbert County's pre-school group is expected to reduce from 11.6 percent of the total in 1960 to 10.9 percent in 1980. This declining proportion, however, will represent a numerical increase of 1,626 over the 20 year period. Similarly, Lauderdale County's pre-school group should reflect a proportionate decline from 11.8 percent in 1960 to 10.9 percent in 1980, but present a numerical increase of 1,591 children.

The percent of persons in the school age group should also decline slightly in both counties during the 20 year period, while producing a significant numercial increase. Colbert County's proportion should reduce from 22.4 percent to 20.7 percent, while increasing numerically by 2,923 persons. A net increase of 3,384 is expected in Lauderdale's school age group, while the proportion drops from 21.4 percent to 20.5 percent.

The principal reason for the projected declining proportions of persons under age 15 in both counties is a decline in birth rates in recent years which is partly due to out-migration of persons in the highly mobile child bearing age groups plus a tendency toward smaller family size.

Proportionate increases and sizable numerical gains are expected to occur in both counties within the young productive age group. Colbert's proportion should climb from 26.9 percent to 28.5 percent, reflecting a net increase of 5,901 persons. Lauderdale's net gain of 6,550 in the young productive group represents an increase from 28.1 percent in 1960 to 29.6 percent of the total in 1980.

The established productive group in both counties will increase at decreasing rates during the 20 year period as Colbert adds 3,994 persons to this group and Lauderdale County adds 3,936 persons.

The last group, while being smaller numerically in both counties, is expected to gain significantly during the forecast period—increasing at an increasing rate. The retired group in Colbert County should rise proportionately from 7.4 percent to 10.9 percent with a net gain of 3,652 persons. Lauderdale County, similarly, will add 3,815 persons in the retired group as the proportionate size grows from 7.3 percent in 1960 to 10.2 percent in 1980. The two primary reasons for the dynamic change expected in the 65 and over age group are: (1) increased life expectancy, and (2) the relative effects of out-migration in the younger, highly mobile age groups.

TABLE 44

PAST AND FUTURE POPULATION BY AGE GROUPS ACCORDING TO SOCIAL AND ECONOMIC SIMILARITIES, COLBERT COUNTY

	1960		1970		1980	
Category	**Number**	**Percent Distribution**	**Number**	**Percent Distribution**	**Number**	**Percent Distribution**
Pre-School (under 5)	*5,403*	*11.6*	*6,097*	*11.1*	*7,029*	*10.9*
School (5–14)	*10,428*	*22.4*	*11,678*	*21.3*	*13,351*	*20.7*
Young Productive (15–34)	*12,514*	*26.9*	*15,094*	*27.6*	*18,415*	*28.5*
Established Productive (35–64)	*14,783*	*31.7*	*17,005*	*31.1*	*18,777*	*29.0*
Retired (65 and over)	*3,378*	*7.4*	*4,888*	*8.9*	*7,030*	*10.9*
Total	*46,506*	*100.0*	*54,762*	*100.0*	*64,602*	*100.0*

Source: U.S. Census of Population, 1960–Projections by Rust Engineering Company, Urban and Regional Planning Department.

TABLE 45

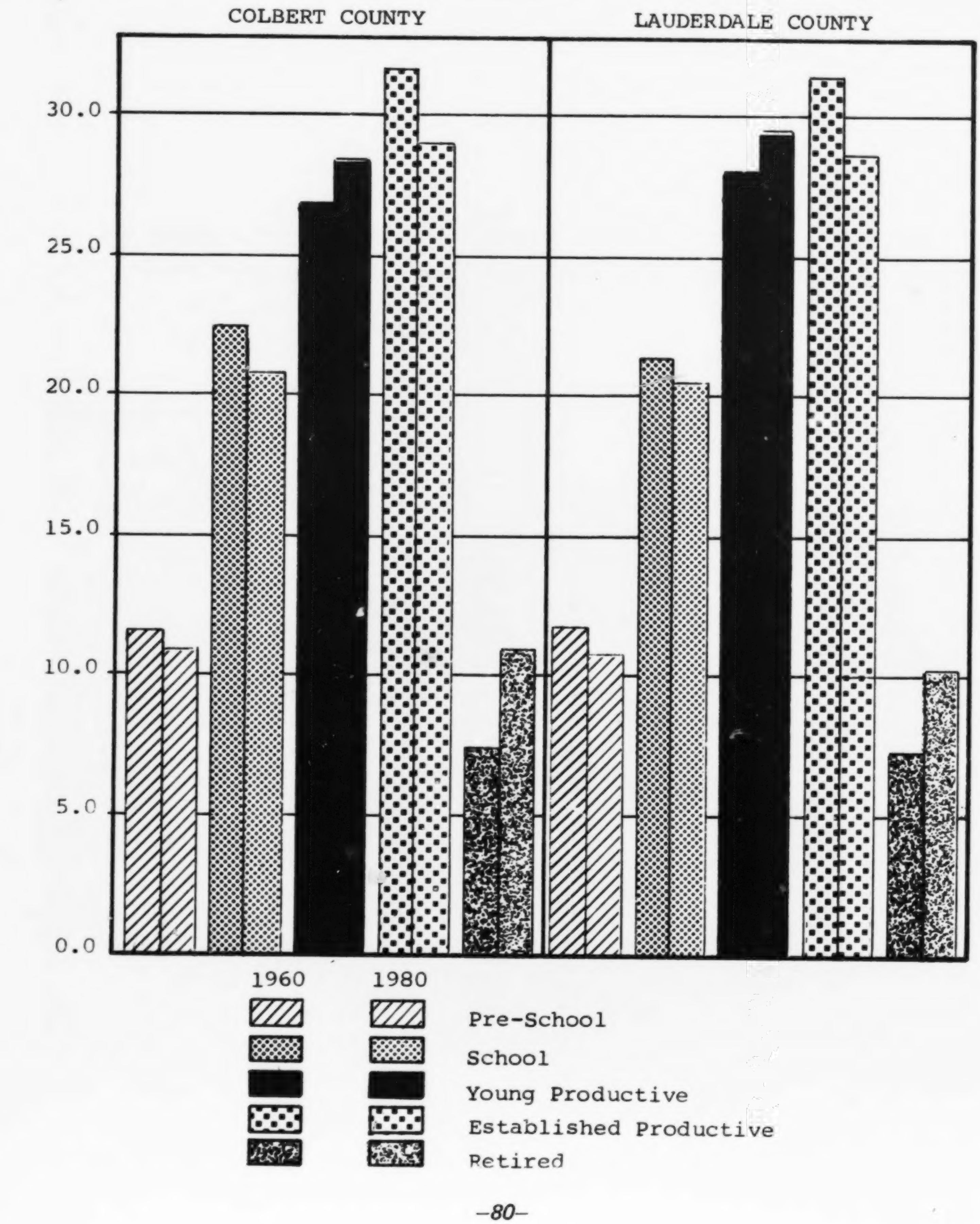
PAST AND FUTURE POPULATION BY AGE GROUPS ACCORDING TO SOCIAL AND ECONOMIC SIMILARITIES, LAUDERDALE COUNTY

	1960		1970		1980	
Category	**Number**	**Percent Distribution**	**Number**	**Percent Distribution**	**Number**	**Percent Distribution**
Pre-School (under 5)	*7,260*	*11.8*	*7,893*	*11.1*	*8,851*	*10.9*
School (5–14)	*13,186*	*21.4*	*14,974*	*21.1*	*16,570*	*20.5*
Young Productive (15–34)	*17,340*	*28.1*	*19,933*	*28.2*	*23,890*	*29.6*
Established Productive (35–64)	*19,369*	*31.4*	*22,074*	*31.2*	*23,305*	*28.8*
Retired (65 and over)	*4,467*	*7.3*	*5,964*	*8.4*	*8,282*	*10.2*
Total	*61,622*	*100.0*	*70,838*	*100.0*	*80,898*	*100.0*

Source: U.S. Census of Population, 1960–Projections by Rust Engineering Company, Urban and Regional Planning Department.

CHART 10

PERCENT DISTRIBUTION OF POPULATION BY
SOCIAL AND ECONOMIC GROUP,
COLBERT AND LAUDERDALE COUNTIES
1960 ——— 1980



SIGNIFICANCE OF FUTURE TRENDS

Basically, Muscle Shoals Area's future population will contain increased proportions of young productive persons and retired persons and decreased proportions of pre-school, school and established productive citizens. If new jobs are not created to keep the highly mobile young productive workers at home, the area could become one in which the non-productive segment of the population is growing more rapidly than the productive segment; and, as a result, the proportion of persons actually providing support will be decreasing, while the proportion of persons dependent upon support is increasing. Therefore, the situation could become such that each employed member of society would be having to provide support for increasing numbers of non-productive citizens. With these possibilities in mind, Muscle Shoals citizens are in an excellent position to plan for the change in demand which will surely accompany the changing face of the population.

Of a general nature, the fact that the total population of the Muscle Shoals Area is expected to increase by approximately 26,000 persons between 1960 and 1980 indicates a need will exist for increased public services and facilities, e.g., water, sewage, etc. Specifically, Colbert and Lauderdale Counties must prepare to meet the demands which will accompany the increase in school age children. The educational systems must be expanded in order to provide for an expected increase of approximately 6,300 students over the 20 year period. Also of importance is the need for expanded recreational facilities in order to provide organized programs for the leisure time activities of the youth.

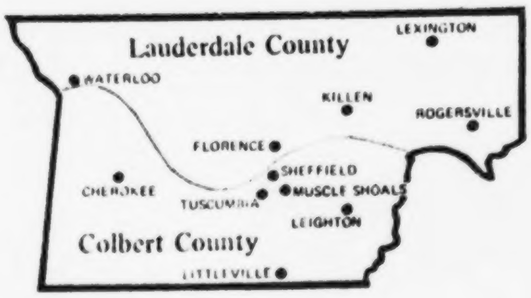
Of paramount importance is the need for expanded services and facilities to accommodate the rapidly expanding retired segment of the population. Of particular importance is the need for recreational facilities, housing, and nursing homes.

Also to be considered is the change in the composition of the labor force which will accompany the change in the composition of the population. As the proportions of those in the established productive group decrease, and the proportions of those in the young productive group increase, the age of the labor force will become increasingly younger. This is important to local industry because the labor force will, as time passes, contain increased proportions of those persons who are at their most productive stage of life. The age of the labor force is also important in that it will affect the demand for new homes, furniture, appliances, cars, etc.

Finally, it should be of special interest to merchants in the area that as the composition of the population changes, the demand for goods and services oriented toward the various segments of the population will change accordingly.

These are only several of the many ramifications which the changing complexion of the population will exert on the community. They are important in that they serve to illustrate that a community is never static, but in a constant state of flux. These changes *create problems for which there are no panaceas and no ends. They must be continually identified and planned for in accordance with the overall needs and demands of the community.*

Those engaged in local planning for the Muscle Shoals Area should continually keep in mind that all projections made in this study should be periodically revised as conditions change and additional data are available. The accuracy of these projections is limited to a large extent on past trends and as these trends change in the years to come, they must be reprojected for revised estimates.


Lauderdale County
LEXINGTON
WATERLOO
KILLEN
ROGERSVILLE
FLORENCE
SHEFFIELD
CHEROKEE
TUSCUMBIA
MUSCLE SHOALS
LEIGHTON
Colbert County
LITTLEVILLE

Muscle Shoals

Council of Local Governments

P. O. Box 2358 Muscle Shoals, Alabama 35660

S. E. Munsey
Executive Director

Area Code 205
383-3861

Estes R. Flynt, Lauderdale
County, Chairman

David W. Pruett, Colbert
County, Vice Chairman

TRANSMITTAL MEMORANDUM

FROM: Muscle Shoals Council of Local Governments

SUBJECT: Report on Abstract of Report Published Under
HUD Planning Assistance

Pursuant to HUD Handbook II, March 1969, change 1, Chapter4. Reports, Paragraph 14, we submit the enclosed report (s) for your handling.

Enclosure

"UNITY FOR PROGRESS"

PB 184 059

ADDENDUM

The following information was added to enhance understanding by the reader at the request of the Economic and Market Analysis Division of the U.S. Department of Housing and Urban Development, Atlanta, Georgia.

Although population growth is the result of many forces—social, economic, and political—economic opportunity is probably most influential. To the extent that physical mobility is unrestricted, men gravitate toward those areas where employment opportunities are, or are believed to be, most abundant and most easily secured. Thus, population can be considered a function of an area's job generating capability.

The Muscle Shoals Area's resident labor force consists of all unemployed persons plus those residents working within the Area and those residents commuting outside the Area to places of work. An interesting relationship is found in the derivation of the Area's labor force participation ratio, shown below:

	Total Employment	Unemployment	Net Commuters	Resident Labor Force	Population	Participation Ratio
1965	*37,800*	*2,380*	*(in) 1,850*	*38,330*	*116,864*	*32.8*
1970	*40,770*	*2,500*	*(in) 1,990*	*41,280*	*125,600*	*32.9*
1975	*43,710*	*3,060*	*(in) 2,140*	*44,630*	*135,250*	*33.0*
1980	*46,640*	*3,730*	*(in) 2,280*	*48,090*	*145,500*	*33.1*

This ratio represents the proportion of population that is employed or is seeking employment. In 1965, the Area's labor force participation ratio was 32.8 percent. By 1980, it will be approximately 33.1 percent. The projected increase will develop primarily as the result of an increase in the participation of the female population in the labor force. Thus, with a resident labor force of 48,090, the Muscle Shoals Area should have a population of approximately 145,500 by 1980.

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